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Vol. III.

of the

Botanists Repository

Comprising,

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

Linnæan System

by

H. Andrews

Botanical Painter Engraver &c.

Mo. Bot. Garden
1904.

PLATE CXLV.

HILLIA LONGIFLORA.

Long-flowered Hillia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium hexaphyllum; foliolis oblongis, acutis, erectis.

COROLLA monopetala; tubus cylindricus, longiſſimus; limbus ſexfidus; laciniis oblongis, planis.

STAMINA. Filamenta ſex, breviſſima. Antheræ oblongæ, erectæ, intra faucem corollæ.

PISTILLUM. Germen inferum, oblongum, obſolete hexagonum. Stylus filiformis, longitudine tubi. Stigma capitatum.

PERICARPIUM oblongum, compreſſum, biloculare.

SEMINA numeroſa, minima.

EMPALEMENT. Cup ſix-leaved; leaflets oblong, ſharp pointed and upright.

BLOSSOM one petal, tube cylindrical, very long; border ſix-cleft; ſegments oblong, flat.

CHIVES. Threads ſix very ſhort. Tips oblong, upright, within the mouth of the bloſſom.

POINTAL. Seed-bud beneath oblong, ſlightly ſix-ſided. Shaft thread-ſhaped, the length of the tube. Summit headed.

SEED-VESSEL oblong, flattened and two celled.

SEEDS many, very ſmall.

SPECIFIC CHARACTER.

Hillia corollis ſexfidis, laciniis lanceolatis, ſupra convexis; foliis ovatis, acutis, glabris.

Hillia with bloſſoms ſix cleft, ſegments lance-ſhaped, convex above; leaves egg-ſhaped, pointed and ſmooth.

REFERENCE TO THE PLATE.

1. A flower cut open, to expoſe the number and ſituation of the Chives.
2. The Shaft and its ſummit, natural ſize, placed by the flower, to ſhew its proportional length to the tube.
3. The Seed-bud, with the leaflets of the Empalement attached, cut tranſverſely, to ſhew the diviſion of the cells in the center.

THIS ſpecies of Hillia was firſt introduced to our gardens in the year 1789, from the Iſland of Barbadoes, ſent in plants, by Mr. J. Elcock, to Meſſrs. Lee and Kennedy, Hammerſmith. Originally this ſhrub was ſpecifically termed, *parasitica* by profeſſor Jacquin, when he firſt formed, and titled the Genus, after Dr. J. Hill, of voluminous memory; from a ſuppoſition that it was to be found growing, only, upon ſome other plant; a circumſtanee, which being denied by Swartz, he has altered it to *longiflora*. We have followed the latter name that ours may go in uniſon with the author of the laſt Species plantarum now publiſhing by Willdenow, as well as profeſſor Martyn, who in his edition of Miller's Dictionary has followed Swartz; they appearing to be the moſt accurate, as well as the moſt read and followed of any modern Botanical authorities. It is a tender hot-houſe plant, ſtrikes eaſily from cuttings, thrives in rich mould and flowers about the end of February. To the Right Hon. Lord Viſcount Valentia we are indebted, for the ſpecimen from which our figure was taken, ſent from his Lordſhip's famed collection at Arley near Bewdley, Staffordſhire; where, we believe, it has flowered for the firſt time in England.

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Hillia longiflora

PLATE CXLVI.

PSORALEA ACULEATA.

Prickly Psoralea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two ſets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tuberculis punctatum, quinquefidum; laciniis acutis, æqualibus, perſiſtentibus; infima duplo longiore.

COROLLA papilionacea, pentapetala.
Vexillum subrotundum, emarginatum, aſſurgens.
Alæ lunulatæ, obtuſæ, parvæ.
Carina dipetala, lunulata, obtuſa.

STAMINA. Filamenta diadelpha (ſimplex ſetaceum et novem coalita), adſcendentia. Antheræ ſubrotundæ.

PISTILLUM. Germen lineare. Stylus ſubulatus, adſcendens, longitudine ſtaminum. Stigma obtuſum.

PERICARPIUM. Legumen longitudine calycis, compreſſum, adſcendens, acuminatum.

SEMEN unicum, reniforme.

EMPALEMENT. Cup one leaf, dotted over with ſmall tubercles, and five-cleft; the ſegments equal and remaining, the lower one twice the length of the others.

BLOSSOM butterfly-ſhaped, five-petalled.
Standard nearly round, notched at the end, turned upwards.
Wings half-moon-ſhaped, obtuſe, ſmall.
Keel two-petalled, half-moon-ſhaped, obtuſe.

CHIVES. Threads in two ſets (a ſingle one like a briſtle, and nine united), aſcending. Tips nearly round.

POINTAL. Seed-bud linear. Shaft awl-ſhaped, aſcending, the length of the chives. Summit blunt.

SEED-VESSEL. A pod the length of the cup, flattened, aſcending, and tapered to the point.

SEED, one, kidney-ſhaped.

SPECIFIC CHARACTER.

Pſoralea foliis ternatis, minimis, confertiſſimis, recurvatis, in ſpinulam deſinentibus.

Pſoralea with three-leafletted leaves, very ſmall, very crowded, bent back, and ending in a ſmall ſpine.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Standard of a Bloſſom.
3. One of the Wings of the ſame.
4. The two Petals of the Keel.
5. The Chives, a little magnified.

THE Prickly Pſoralea is not a new plant in our collections; for, it was firſt introduced by Mr. F. Maſſon to the Royal Gardens at Kew, as we learn from the Catalogue, in the year 1774. But although ſo long a ſojourner with us, it is not found in many collections, owing to the difficulty in its increaſe, as it ſeldom ripens its ſeeds; and cuttings, the only remaining method, but seldom ſucceed; although by taking them from a vigorous growing plant and giving them the aſſiſtance of the bark bed of the hothouſe, early in March, a few plants have been procured occasionally. Our drawing was made from a moſt beautiful plant in the Clapham Collection, laſt year, in the month of Auguſt.

Psoralea aculeata

PLATE CXLVII.

GLADIOLUS CUSPIDATUS.

Spear-ſpotted Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſexpartita, ringens. Stamina adſcendentia.	BLOSSOM ſix diviſions, gaping. Chives aſcending. See GLADIOLUS ROSEUS. Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-enſiformibus, glabris; corolla ringente; laciniis longiſſimis, acuminatis, undulatis, ſubæqualibus, tribus inferioribus in medio macula oblonga notatis.	Gladiolus with leaves that are linearly ſword-ſhaped and ſmooth; bloſſom gaping; ſegments very long, tapered to the point, waved and nearly equal, the three lower in the middle have an oblong ſpot.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A bloſſom cut open, with the Chives remaining attached.
3. The Seed-bud, Shaft, and Summit.

THE Gladiolus here figured, repreſents a variety of one of the moſt errant ſpecies of the Genus, known commonly by the name of Spade Gladiolus, and of which we have drawings of eight, quite diſtinct; yet all, unqueſtionably, originating in one common parent. It was introduced in 1796, from the Cape of Good Hope, by Mr. R. Williams, nurſeryman of Turnham-green, near Brentford; is a very hardy greenhouſe bulb, increaſes from the root in abundance, if planted in very ſandy peat earth, and flowers about the Month of April, or May.

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Gladiolus cuspidatus.

PLATE CXLVIII.

LACHENALIA QUADRICOLOR.

Four-coloured Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COR. 6-petala, infera; petalis 3 interioribus longioribus. Stamina erecta. Capſula ſubovata, trialata. Semina globoſa.

BLOSS. 6-petals, beneath; the three inner petals the longest. Chives erect. Capſule nearly egg-ſhaped, three winged. Seeds globular.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, lineari-lanceolatis; ſcapo erecto; corollis propendulis, cylindricis, quadricoloratis, cum limbo petalorum interiorum patulo.

Lachenalia with leaves in pairs, linearly lance-ſhaped; flower-ſtem erect; bloſſoms hanging down, cylindrical, and four-coloured, with the border of inner petals ſpreading out.

REFERENCE TO THE PLATE.

1. A Flower cut open, with the Chives remaining.
2. An inner Petal, with its Chive, ſhewn from the inſide.
3. An outer Petal, ſhewn from the outſide.
4. The Pointal complete.

ABOUT the year 1789, this very handſome ſpecies of Lachenalia was firſt received by Meſſrs. Lee and Kennedy, Hammerſmith, from the Cape of Good Hope, ſent in bulbs to them by J. Pringle, Eſq. It is as hardy as the L. tricolor, to which it much inclines, well known to collectors, and is equally eaſily propagated; an excellent figure of which is to be found, in the 82d Plate of the Botanical Magazine of Mr. Curtis. The L. quadricolor is given as a ſynonym by Willdenow to L. pendula, a plant we have already figured, and from which this ſtands quite diſtinct in the conformation of every part; they are both to be found in the 2d Vol. of Icon. of Jacquin, from whom we copy our ſpecific title, the pendula, t. 400, the quadricolor, t. 396.

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Lachenalia quadricolor

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PLATE CXLIX.

STRUTHIOLA CILIATA.

Fringed-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PERIANTHIUM diphyllum. Corolla tubulosa, 4-fida; Nectarium, glandulæ octo fauci circumpositæ. Semen unum, subbaccatum.

CUP two-leaved. Blossom tubular, 4-cleft; Honey-cup, 8 glands placed round the mouth of the blossom. One seed like a berry.
See STRUTHIOLA IMBRICATA, Pl. CXIII. Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovato-lanceolatis, mucronatis, ciliatis, concavis, quadrifariam imbricatis, apice incurvis; corolla subalbida.

Struthiola with leaves between egg and lance-shaped, pointed, fringed, concave, tiled in four rows, turned inwards at the point; blossom whitish.

REFERENCE TO THE PLATE.

1. A leaf shewn side-ways that the incurvature of the upper part may be seen.
2. A flower complete.
3. The two leaves of the Empalement, magnified.
4. A blossom cut open, to expose the situation of the chives, at the mouth of the tube, magnified.
5. The Pointal, a little magnified.

THIS is the variety of Struthiola ciliata promised in the last number. It varies from the other in the largeness and incurvation of the leaves, and colour of the flower, as well as, in the growth of the plant; in this, the stem rises to three feet; in that, it seldom exceeds one. With rather less difficulty it is increased and preserved than the red variety, and makes a very handsome figured plant, flowering in the month of August, at which season, last year, our drawing was taken from a plant in the Hibbertian Collection. This Var. has the advantage of the other, in having the blossoms extremely fragrant, in the evening.

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Struthiola striata

PLATE CL.

GERANIUM PRÆMORSUM.

Bitten-leaved Geranium.

CLASS XVI. ORDER IV. *of Suppl. Syst. Veg.* 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	One Pointal. Five ſummits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis inciſo-lobatis, reniformibus; lobis cuneiformibus, præmorſis; floribus ſubſolitariis, heptandris; caule flexuoſo, ſubcarnoso.	Geranium with leaves deeply cut into lobes and kidney-ſhaped; lobes wedge-ſhaped, and bitten at the ends; flowers generally ſolitary, with ſeven fertile tips; ſtem grows zig-zag, rather fleſhy.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal.
3. The Chives ſpread open.
4. The Pointal and Seed-bud.

THE Geranium præmorſum offers a moſt beautiful addition to this already very extenſive genus, but is without doubt a true ſpecies. It is a native of the Cape of Good Hope, and was introduced to us, from thence, in the year 1798, by Captain Quarrel; brought in ſeed, and communicated to Mr. J. Colville of the King's Road, Chelſea; who informs us, that it flowers from March, till November, that he keeps it in rich dungy earth, and that it is raiſed, pretty freely, by cuttings; requiring the heat of a dry ſtove in the winter months. Our figure was made at the nurſery, Chelſea, about the beginning of March this year.

Geranium praemorsum

PLATE CLI.

PITTOSPORUM CORIACEUM.

Thick-leaved Pittoſporum.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, inferum, deciduum.

COROLLA. Petala quinque; ungues concavi, in tubum urceolatum conniventes; laminæ ovato-oblongæ, patentes.

STAMINA. Filamenta quinque, ſubulata, receptaculo inſerta. Antheræ ſagittatæ, erectæ, filamentis dorſo affixæ.

PISTILLUM. Germen ovatum, ſuperum, compreſſum. Stylus breviſſimus, cylindricus. Stigma capitatum, planum.

PERICARPIUM. Bacca ſubgloboſa, 2-5 locularis, 2-5 valvis; loculamentis pulpa reſinoſa ſcatentibus; diſſepimenta valvulis contraria.

SEMINA tria ſeu quatuor, angulata, oblonga, obtuſa, oſſea.

EMPALEMENT. Cup five-leaved, beneath, and falling off.

BLOSSOM. Five petals; claws concave, cloſing into a tube pitcher-ſhaped; the borders oblong-egg-ſhaped, ſpreading.

CHIVES. Threads five, awl-ſhaped, inferted into the receptacle. Tips arrow ſhaped, upright, fixed by the back to the threads.

POINTAL. Seed-bud egg-ſhaped, above, flattened. Shaft very ſhort, cylindrical. Summit headed, flat.

SEED VESSEL. A roundiſh berry 2-5 cells, 2-5 valves; the cells filled with a reſinous pulp; partitions contrary to the valves.

SEEDS, three or four, angulated, oblong, obtuſe, and bony.

SPECIFIC CHARACTER.

Pittoſporum foliis ovalibus, obtuſis, glaberrimis, coriaceis, integerrimis.

Pittoſporum with oval leaves, blunt ended, very ſmooth, leathery, and quite entire.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Petal of the Bloſſom.
3. The Chives and Pointal.
4. The Pointal ſeparated from the Chives.
5. A Berry of the ſize when ripe.

ABOUT the year 1783, this plant was firſt raiſed in Britain, from ſeeds which had been received from the Iſland of Madeira, by Meſſrs. Lee and Kennedy, Hammerſmith. It forms one of the moſt decorative and conſpicuous plants, either in the Conſervatory, or Green-houſe; and if encouraged in its growth, by being planted in the border of the one; or kept in rich earth, in a large pot in the other, will attain the height of from 6 to 8 feet. The fineſt ſpecimen we believe, in England, of this plant is to be found in the elegant Conſervatory of the Right Honourable Lord R. Spencer, Woolbedding, Suſſex. The flowers, which grow in cluſters from the ends of the branches in May, have the flavour of Jaſmine; but are rather tranſitory. It is propagated but ſlowly and with difficulty, as it does not perfect its ſeeds with us, and it is not to be increaſed by laying: the only method is cuttings, which ſhould be taken whilſt very young and tender from the plant, about April, and put from 6 to 8 in a pot, fixed very tight, in ſtiffiſh loam; they must remain under a hand-glaſs on a ſhady border till Autumn, when they may be removed into the hot-houſe and plunged into the bark bed, where they will begin to grow the enſuing ſpring.

Killesporum coriaceum

PLATE CLII.

GERANIUM SPATHULATUM.

Spatula-leaved Geranium.

CLASS XVI. ORDER IV. *of Suppl. Syst. Veg.* 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	One Pointal. Five ſummits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis integerrimis, ſpathulatis, glabris, obtuſis, radicalibus; calycibus monophyllis; ſtaminibus quinque fertilibus; radice tuberoſa.	GERANIUM with quite entire leaves, ſpatula-ſhaped, ſmooth, blunt, and growing from the root; cups one-leaved; five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its hollow ſtructure.
2. The Chives and Pointal natural ſize.
3. The Chives ſpread open, to ſhew the number and ſituation of the fertile ones, which are alternate.
4. The Pointal magnified.

THE greater number of Geraniums which have been introduced of late, are of the tuberous herbaceous kind; drawings of 14 we have, independent of thoſe already figured; conſtituting a diſtinguiſhed, and diſtinct natural branch of this extenſive family. For the moſt part, they have only five fertile chives with tubular empalements, ſome only two, and others ſeven, with the footſtalk of the flower ſolid up to the bottom of the cup. This ſpecies is as yet, we believe, only in the Hibbertian Collection, Clapham, where our drawing was taken in April this year. The roots had been received in the autumn of 1800 from the Cape. It appears to require the ſame management as G. punctatum, and like it, may be increaſed by the root.

Geranium spathulatum

PLATE CLIII.

VIOLA PEDATA.

Bird's-foot-leaved Violet.

CLASS XIX. ORDER VI.

SYNGENESIA POLYGAMIA MONOGAMIA. Tips united. Flowers ſimple.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, breve, perſiſtens; foliolis ovato-oblongis, erectis, apice acutioribus, baſi obtuſis, ſupra baſin affixis, æqualibus, ſed diſpoſitione variis; quorum duo fulciunt petalum α.; ſingula ſingulum petalum β. γ.; unicum duo petala δ. ε. ſimùl.

COROLLA pentapetala, irregularis, petalis inæqualibus; quorum

Petalum α. ſupremum rectum, deorſum ſpectans, latius, obtuſius, emarginatum, deſinens baſi in nectarium corniculatum, obtuſum, inter calycis foliola prominens.

β. γ. *Lateralia* paria, obtuſa, oppoſita, recta.

δ. ε. *Infima* paria, majora, ſurſum reflexa.

STAMINA. Filamenta quinque, minima, quorum duo petalo α. proxima appendicibus annexis intrant nectarium. Antheræ ſæpius connexæ, obtuſæ, membranis ad apicem auctæ.

PISTILLUM. Germen ſubrotundum. Stylus filiformis, extra antheras prominens. Stigma obliquum.

PERICARPIUM. Capſula ovata, trigona, obtuſa, unilocularis, trivalvis.

SEMINA plura, ovata, appendiculata, valvis affixa. Receptaculum lineare, per ſingulam valvulam lineæ inſtar excurrens.

Obs. Stigma vel in hamum simplicem reflectitur, vel capitulum est concavum apice perforato.

CUP five-leaved, ſhort, permanent; leaflets oblong-egg-ſhaped, erect, ſharpiſh at the point, blunt at the bottom, joined together above the baſe, equal, but variouſly diſpoſed; of which, two ſupport petal α. one each petal β γ. and one the two petals δ. ε. together.

BLOSSOM five petals, irregular, unequal petals, of which

The upper petal α. is upright, bent back, broader, and blunter than the reſt, notched at the end, terminating at the baſe in a blunt horn-ſhaped honey-cup, protruding between the leaflets of the cup.

The lateral petals β. γ. grow in pairs, obtuſe, oppoſite, upright.

The lower petals δ. ε. grow in pairs, larger, and reflexed upwards.

CHIVES. Five threads, very ſmall; of which the two neareſt to the petal α. have ſmall appendages which enter the honey-cup. Tips generally united, blunt, enlarged by ſkinny ſubſtances at the end.

POINTAL. Seed-bud roundiſh. Shaft thread-ſhaped, projecting beyond the tips. Summit oblique.

SEED-VESSEL. Capſule egg-ſhaped, three-ſided, blunt, one cell and three valves.

SEEDS many, egg-ſhaped, having appendages, fixed to the valves. Receptacle linear, running like a line along each valve.

Obs. The summit is either reflexed into a simple hook, or a concave small head perforated at the end.

SPECIFIC CHARACTER.

VIOLA acaulis; foliis pedatis, ſeptempartitis; laciniis dentatis.

VIOLET without a ſtem, leaves formed like a bird's foot, with ſeven diviſions; ſegments toothed.

REFERENCE TO THE PLATE.

1. The Empalement.
2. One of the upper Petals of the Bloſſom.
3. One of the lateral Petals.
4. The lower Petal, with its Honey-cup.
5. The Chives and Pointal with the Appendages that fall into the Honey-cup from the two hinder threads.
6. The Pointal magnified.

THE Bird's-foot-leaved Violet is a native of North America near Philadelphia; and (according to the Kew Catalogue) was cultivated by Mr. P. Miller, in 1759, at the Phyſic Gardens, Chelſea. It is a hardy herbaceous plant, but is ſometimes deſtroyed by the wetneſs of our autumnal months: the flowers, if kept in the open air, expand about May, or the beginning of June; but if kept in pots they, with a ſlight protection from the Spring froſts, will be produced in April. Peat earth is the ſoil it approves moſt, and it ſhould not be expoſed to too much wet, whether planted in the borders or in pots. The roots may be parted in March.

Viola pedata

PLATE CLIV.

ECHIUM ARGENTEUM.

Silvery-leaved Viper's-Bugloſs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nudâ.

BLOSSOM irregular, mouth naked.
See ECHIUM GRANDIFLORUM, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium foliis lanceolatis, acutis, ſericeo-villoſis; ſpicis terminalibus; corolla violacea, ſubæqualia.

Viper's-bugloſs with lance-ſhaped leaves, ſharp-pointed and ſilkily-hairy; ſpikes terminate the branches; bloſſom violet colour, nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives remaining attached.
3. The Seed-buds, Shaft, and Summit.

THIS fine ſpecies of Echium, was raiſed from ſeeds received from the Cape of Good Hope in the year 1789, at the nurſery, Hammerſmith; where our drawing was made, laſt year, from a plant which had been planted in the open ground, for the ſummer months; and where it had grown to the height of four feet. It is a hardy green-houſe plant, and grows beſt in light earth, either peat, or leaf mould; and flowers about July. It is as difficult to propagate as either, the E. grandiflorum, or E. ferociſſimum; but only to be increaſed, like them, by cuttings.

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Echium argenteum

PLATE CLV.

IXIA POLYSTACHIA.

Many-ſpiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, patens, equalis. Stigmata 3, erectiuſculo-patula.	Blossom 6-diviſions, ſpreading, equal. Summits three, nearly upright and ſpreading. See Ixia reflexa, Vol. I. Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus; ſcapo ſpicis pluribus; floribus oppoſitis, ſpicatis; corollis albidis.	Ixia with linear leaves; flower-ſtem with many ſpikes; flowers grow oppoſite and ſpiked; bloſſoms white.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A flower cut open to ſhew the ſituation of the Chives.
3. The Pointal natural ſize.

This is the plant which is figured by Miller, in the coloured plates which correſpond with the dictionary, 104, t. 155. fig. 2. under the ſpecific title it here bears; and, ſays the Kew Catalogue, was cultivated by him 1757. Since this is the firſt which bore the title of Polyſtachia, and being of the colour we think is moſtly primitive in flowers, we have given it the preference; and ſhall conſider all the other 18, (of which we have drawings and decidedly of this ſpecies) as varieties from this. The flowers of this ſpecies are more laſting than moſt of the others; and are in general, eſpecially this ſort, very hardy. It propagates freely by the root and by ſeed. Our drawing was made at the nurſery, Hammerſmith, laſt year, in the month of May.

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PLATE CLVI.

BANKSIA ERICÆFOLIA.

Heath-leaved Bankſia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, ſquamoſum. Corolla tetra-petala. Stamina limbo inſerta. Capſula bivalvis, diſperma, interjecto ſeminibus diſſepimento mobili. Semina alata.

Common receptacle elongated, ſcaly. Bloſſom of four petals. Chives inſerted into the limb of the bloſſom. Capſule with two valves, two ſeeds, and a moveable partition betwen them. Seeds winged.

See BANKSIA SERRATA, Pl. LXXXII. Vol. II.

SPECIFIC CHARACTER.

Bankſia foliis linearibus, margine revolutis, truncato-emarginatis, ſupra glabris.

Bankſia with linear leaves, rolled back at the edge, appearing cut off at the ends, which are notched and ſmooth on the upper ſide.

REFERENCE TO THE PLATE.

1. A Bloſſom complete.
2. The ſame ſpread open.
3. The Petals of a flower, with their chives magnified.
4. The Pointal natural ſize, with the Summit detached, magnified.
5. The rudiments of a cone, cleared from the flowers.

THE ſeeds of this ſpecies of Bankſia were amongſt the firſt which arrived from New Holland, and plants were raiſed at the nurſery, Hammerſmith, in the ſame year as the B. ſerrata. To the directions in the management and increaſe of which plant, we refer our readers for the treatment of this, as it requires no other. It grows to the height of five, or ſix feet, very buſhy from the bottom, and the leaves, which are harſh and numerous, are not very ſubject to decay. Although it has flowered in many collections, where we have ſeen it, we have had no opportunity of making an accurate drawing until laſt month, March 1801, from a fine plant in the collection of G. Hibbert Eſq. Clapham.

Banksia ericafolia

PLATE CLVII.

CORDIA SEBESTENA.

Rough-leaved Cordia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, apice dentatum, perſiſtens.

COROLLA monopetala, infundibuliformis; tubus patulus, longitudine calycis; limbus erecto-patens, ſectus in quinque (quatuor vel ſex), lacinias obtuſas.

STAMINA. Filamenta quinque, ſubulata. Antheræ oblongæ, longitudine tubi.

PISTILLUM. Germen ſubrotundum, acuminatum. Stylus ſimplex, longitudine ſtaminum, ſuperne bifidus, laciniis bifidis. Stigmata obtuſa.

PERICARPIUM. Drupa globoſa, acuminata, calyce accreta.

SEMEN. Nux ſulcata, quadrilocularis.

EMPALEMENT. Cup one leaf, tubular, toothed at the upper part, remaining.

BLOSSOM one petal, funnel-ſhaped; tube widening, the length of the cup; border upright and ſpreading, cut into five (four or ſix) obtuſe ſegments.

CHIVES. Five threads, awl-ſhaped. Tips oblong, the length of the tube.

POINTAL. Seed-bud roundiſh, tapered. Shaft ſimple, the length of the chives, two-cleft at the upper part, ſegments two-cleft. Summits blunt.

SEED-VESSEL, pulpy, globular, tapered, growing to the cup.

SEED. A furrowed, four-celled nut.

SPECIFIC CHARACTER.

Cordia foliis oblongo-ovatis, ſcabris; floribus miniatis, criſpis, hexandris.

Cordia with oblong egg-ſhaped rough leaves; flowers deep orange colour, crumpled, and with ſix chives.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom ſpread open, with the Chives in their place.
6. The Pointal and Seed-bud.

As it ſhould ſeem a determined principle in the inſcrutable arrangement of nature's productions, to the greater humiliation of our very limited underſtandings; that no effort as emanating ſolely from thence, ſhall be perfect; ſo muſt we be content to purſue our Botanical travel, under the guidance of a ſyſtem decidedly defective; yet certainly, the beſt we have to boaſt. Scarce a genus, comprehending a number of ſpecies, but muſt be ſtrained in its claſs or order, for the introduction of one, or more ſpecies, evidently of the ſame family. So convinced was our great maſter of the ſcience, of the impoſſibility of forming ſuch certain data, that to prevent the confuſion and difficulty, which muſt have ariſen, from ſuch an accumulation of Genera, if every ſexual character was attended to, that, where certain other characters (called by him eſſential, and adopted as a ſubſtitute for ſuch occaſional hiatus) are formed, the plant is retained under the Genus ſo characteriſed. This diſquiſition is the natural reſult of our examination of the preſent plant, which, although the chives are ſix, is placed in the fifth class!

The Rough-leaved Cordia is a native of the Weſt India Iſlands, and was cultivated, ſays Martyn's Dictionary, from Dillenius, in the year 1728, by Dr. Sherard. It is a tender hot-houſe plant, may be increaſed by cuttings made about the month of April, if kept from too much moiſture, in a pot of ſandy loam, under a ſmall ſtriking glaſs in the bark-bed. At preſent it is rather a ſcarce plant in our collections, and as it is rather difficult to propagate, is likely to continue ſo, at leaſt for ſome years. From an imported plant, received by Meſſrs. Lee and Kennedy, Hammerſmith, from the iſland of Barbadoes, our figure was taken in the year 1789, about the month of July. It is grown to the greateſt perfection by keeping it in a mixture of rotten dung and loam.

Cordia Sebestena

PLATE CLVIII.

GERANIUM ECHINATUM.

Var. flore rubro-purpureo.

Prickly ſtalked Geranium.

Red-purple flowered Var.

CLASS XVI. ORDER IV. *of Suppl. Syst. Veg.* 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata 5. Fructus roſtratus, penta-coccus.	One Pointal. Five Summits. Fruit furniſhed with long awns, five dry berries. See Geranium Grandiflorum. Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis ſericeis, cordatis, inequaliter dentatis; caule ſpinoſo, ſubcarnoſo, ſpinis retrofractis; floribus hexandris, rubro-purpureis; calycibus piloſis.	Geranium with ſilky heart-ſhaped leaves, unequally toothed; ſtem ſpiny, rather fleſhy, ſpines turned downwards; flowers with ſix fertile tips and red-purple; cups hairy.

REFERENCE TO THE PLATE.

1. The Empalement.
2. An upper Petal of the Bloſſom.
3. An under Petal of the Bloſſom.
4. The Chives and Pointal.
5. The Chives ſpread open.
6. The Pointal, magnified.

This fine variety of the Prickly-ſtalked Geranium, was introduced, at the ſame time with the white variety, by Mr. Francis Maſſon, to the Royal Gardens, Kew, in the year 1795. It is a tender plant, and requires the heat of the hot-houſe, through the winter months to preſerve it, being a native of that part of Africa near the Namaqua land, which is in moſt parts a barren, arid ſand, extremely hot and parched, experiencing little change through the whole year. The propagation is either produced by cuttings, or from the roots, which are tuberous, in moſt inſtances, if the plant is kept in light ſandy peat earth. The drawing was made, in March this year, at the Nurſery of Mr. J. Colville, King's Road, Chelſea.

Geranium echinatum
var flore rubro purpureo

PLATE CLIX.

IXIA CAPITATA.

Var. flore albo, fundo nigro.

Bunch-flowering Ixia.

Var. white flowered, black bottom.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata tria, erectiuſculo-patula.

BLOSSOM ſix petals, ſpreading, equal. Summits three, nearly upright, ſpreading.
See IXIA REFLEXA, Vol. I. Plate XIV.

SPECIFIC CHARACTER.

Ixia, foliis enſiformibus; floribus capitatis, confertis, albidis, petalis baſi nigriſſime notatis.

Ixia, with ſword-ſhaped leaves; flowers grow in cloſe bunches, whitiſh, the petals very dark, marked at the baſe.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A Bloſſom ſpread open, with the Chives remaining.
3. The Seed-bud and Pointal, one Summit detached, magnified.

As no difference, either in culture or increaſe, is neceſſary for this plant, more than is required for the other varieties of this ſpecies of Ixia; we ſhall refer our readers to the directions for the treatment of them, for the management of this. Our figure is from a drawing taken at the Hammerſmith nurſery in the year 1799, about the month of May. It is one of thoſe introduced to the Royal Gardens at Kew by Mr. F. Maſſon about the year 1774, although loſt to us for ſome years, but ſince received from the collections in Holland.

Ixia capitata
flore albo fundo nigr

PLATE CLX.

ARISTEA MAJOR.

Spike-flowered Ariſtea.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PETALA 6. Stigma concavum. Capſula triloba, trilocularis, loculis compreſſis. Semina in ſingulo loculo bina, compreſſa truncata.	PETALS 6. Summit concave. Capſule three-lobed, three celled; cells flattened. Seeds two in each cell, flattened and appearing cut off at the end. See ARISTEA CYANEA, Pl. X. Vol. I.

SPECIFIC CHARACTER.

Ariſtea foliis enſiformibus longiſſimis; floribus ſpicatis, cæruleis.	Ariſtea with very long leaves; flowers grow in ſpikes, and blue.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A Bloſſom with the Seed-bud, both cut open and remaining attached, the Shaft removed.
3. The Pointal natural ſize, with the ſummit detached magnified.
4. A ripe ſeed-veſſel, natural ſize.
5. The ſame with the cells laid open to ſhew the ſituation of the ſeeds.

THE Genus Ariſtea, having certainly been formed from a dried ſpecimen of the plant, the alterations we have made in our Generic and Eſſential characters, will, upon inſpecting the diſſections, appear abſolutely neceſſary; as the ſhaft is not bent, in either ſpecies we have examined, whilſt the flower is perfect; but aſſumes that appearance on its decay, as it becomes involved with the petals, which twiſt up in the manner of Moræa, Iris, &c. The Summit likewiſe, is not funnel-ſhaped, but merely a little concave, with a border: other ſmall variations have been made, in the character of the ſeed-veſſel and ſeed. In the year 1794, this fine plant was raiſed by Meſſrs. Lee and Kennedy, from ſeeds received by them from the Cape of Good Hope, where it is native. It is one of the very hardieſt inhabitants of the greenhouſe, and is propagated, either from the ſeed, which ripens with us; or by the offsets made from the root. The plant is perſiſtent, but does not acquire a ſtem; the leaves growing to the length of from two, to three feet, the flower-ſtem ſometimes to the height of four feet; which was nearly that of the plant in the Collection of G. Hibbert, Eſq. Clapham, from which our drawing was taken in the month of July 1800. It ſhould be planted in ſandy peat.

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Iridea major

PLATE CLXI.

HERMANNIA PULVERATA.

Powdered Hermannia.

CLASS XVI. ORDER II.

MONADELPHIA PENTANDRIA. Threads united. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, ſubrotundum, inflatum; lacinulis inflexis; perſiſtens.

COROLLA pentapetala, ſpiralis; ungues longitudine calycis, utrinque aucti membranula connivente in tubum cucullatum nectariferum; limbus patens, latiuſculus, obtuſus.

STAMINA. Filamenta quinque, latiuſcula, inferne leviſſime in unum corpus coalita. Antheræ erectæ, acuminatæ, conniventes.

PISTILLUM. Germen ſubrotundum, pentagonum, quinquangulare. Styli quinque, filiformes, approximati, ſubulati, ſtaminibus longiores. Stigmata ſimplicia.

PERICARPIUM. Capſula ſubrotunda, pentagona, quinque-locularis, apice dehiſcens.

SEMINA plurima, parva.

EMPALEMENT. Cup one leaf, five-cleft, roundiſh and ſwelled out; ſegments turned inwards; remaining.

BLOSSOM, five petals, ſpiral; claws the length of the cup, widened on both ſides by a ſmall ſkinny ſubſtance forming a honey-bearing, cowl-ſhaped tube; border ſpreading, broadiſh, blunt

CHIVES. Five threads, broadiſh, ſlightly joined at the baſe into one body. Tips upright, tapered, and approaching each other.

POINTAL. Seed-bud roundiſh, five-ſided, five-angled. Shafts five, thread-ſhaped, cloſe together, awl ſhaped, longer than the Chives. Summits ſimple.

SEED VESSEL. Capſula roundiſh, five-ſided, five-celled, ſplitting at top.

SEEDS, many, ſmall.

SPECIFIC CHARACTER.

Hermannia foliis bipinnatifidis, ſcabriuſculis, albicantibus; pedunculis bifloris, longiſſimis; corollis ſordidé luteis.

Hermannia with doubly wing-cleft leaves, rather rough and whitiſh; flower-ſtems two-flowered, very long; bloſſoms of a dirty yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A leaf of the Bloſſom, to ſhew its incurved character at the baſe.
3. The Chives, magnified, with the pointals remaining, to ſhew their length with regard to the Chives.
4. The Seed-bud, Shafts, Summits, magnified.

THIS plant appears to ſtand an intermediate character, between Mahernia and Hermannia: the general habit affines moſt to the former, and indeed, the ſhape of the threads, on which the eſſential generical diſtinction reſts, approaches very near to thoſe in Mahernia; for, although they have not abſolutely foot-ſtalks, they are much larger, above the middle, than is uſual in Hermannia, as may be ſeen on the plate; where theſe parts are ſhewn, magnified. It has likewiſe that ſingularly curious character, ſeen in Mahernia, of the two bloſſoms which terminate the flower-ſtems, each taking a contrary direction, in its ſpiral twiſt, to the other. As a greenhouſe plant, it is rather tender in regard to damp, though not to cold; therefore, ſhould be kept in the moſt airy part of the houſe. It is a native of the Cape, from whence it was introduced in the year 1796, to the Royal Gardens, Kew. By cuttings made in the month of April, it may be preſerved, and increaſed, as it is not a long-lived plant. Loam, with a ſmall portion of old rotten dung, it thrives in moſt. Our drawing was taken, at the Nurſery, Hammerſmith, in June 1800.

Hermannia pulverata

PLATE CLXII.

VERBASCUM FERRUGINEUM.

Ruſty-flowered Mullein.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinque-partitum, parvum, perſiſtens; laciniis erectis, acutis.

Corolla monopetala, rotata, ſub-inæqualis; tubus cylindraceus, breviſſimus; limbus patens, quinque-partitus; laciniis ovatis, obtuſis.

Stamina. Filamenta quinque, ſubulata, corolla breviora. Antheræ ſubrotundæ, compreſſæ, erectæ.

Pistillum. Germen ſubrotundum. Stylus filiformis, longitudine ſtaminum, inclinatus. Stigma craſſiuſculum, obtuſum.

Pericarpium. Capſula ſubrotunda, bilocularis, bivalvis, ſuperne dehiſcens. Receptacula dimidiato-ovata, diſſepimento affixa.

Semina numeroſa, angulata.

Obs. In pleriſque ſtamina inclinata ſunt, villiſque coloratis inferne veſtita.

Empalement. Cup of one leaf, with five diviſions, ſmall, remaining; ſegments upright, ſharp pointed.

Blossom one petal, wheel-ſhaped, rather unequal; tube cylindrical, very ſhort; border ſpreading, five diviſions; ſegments egg-ſhaped, blunt.

Chives. Threads five, awl-ſhaped, ſhorter than the bloſſom. Tips roundiſh, flattened, upright.

Pointal. Seed-bud roundiſh. Shaft thread-ſhaped, the length of the chives, bent downward. Summit rather thick and blunt.

Seed-vessel. Capſule roundiſh, with two cells, two valves, ſplitting at the top. Receptacles the form of half an egg, fixed to the partition.

Seeds numerous, angular.

Obs. In the greateſt number of ſpecies the chives are bent downward, and clothed with ſoft, coloured hairs on the lower part.

SPECIFIC CHARACTER.

Verbaſcum foliis ſubvillofis, rugoſis; caulinis ſubſeſſilibus, æqualiter crenatis; radicalibus oblongis, cordatis, duplicato-crenatis.

Mullein with leaves a little hairy and rough; ſtem-leaves almoſt without foot-ſtalks, equally ſcolloped; leaves from the root oblong, heart-ſhaped, and doubly ſcolloped.

REFERENCE TO THE PLATE.

1. A Leaf of the plant, from the lower part.
2. The Empalement.
3. A Bloſſom, ſhewn from the front.
4. The ſame cut open from the ſide, to ſhew the inſertion of the chives.
5. One Chive magnified.
6. The Pointal and Seed-bud, magnified.

The ruſty-flowered Mullein of the Kew Catalogue, collated from Sutherland's Hortus Medicus Edinburghenſis, is undoubtedly our plant; but, though it ſtands a name in the book, we much queſtion its having graced the garden, at the time of its publication. It certainly has been loſt to us above a century, and but recently introduced to the Oxford Botanic Garden by the late Dr. Sibthorpe. Being a hardy biennial, it will perfect its ſeeds about July, which may be ſown in Auguſt the ſame year. It will grow in any ſoil, but a ſandy compoſt of light peat and loam ſuits it moſt. The flowers on the ſpikes, which grow ſometimes to the length of four feet, continue to expand, upwards, for above two months; that is to ſay, from April, till June. Our figure was taken from a ſpecimen ſent by the Hon. W. H. Irby, from his garden at the Parſonage, Farnham Royal, Bucks.

Verbascum ferrugineum

PLATE CLXIII.

AMARYLLIS FOTHERGILLIA.

Fothergillian Lily Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, campanulata. Stigma trifidum.	BLOSSOM 6-petalled, bell-ſhaped. Summit three-cleft.

See AMARYLLIS RADIATA, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis ſpatha multiflora; petalis lanceolatis, apice revolutis; genetalibus erectis; foliis linearibus, ſub-canaliculatis, obtuſis, glaucis.	Lily Daffodil with many flowers in the ſheath; petals lance-ſhaped, rolled back at the point; parts of fructification upright; leaves linear, rather channelled, obtuſe, and of a ſea-green colour.

REFERENCE TO THE PLATE.

1. A Petal, with its Chive attached.
2. The Seed-bud, and Pointal.
3. A ripe Seed-veſſel, with the Seeds.

EVEN amidſt this ſplendid family, Amaryllis Fothergillia ſtands conſpicuouſly preeminent; the flowers have the ſame vivid character of refulgence, when expoſed to the ſun's rays, which is perceived in A. Sarnienſis, or the Guernſey Lily, to which it is nigh affined. The late Dr. Fothergill (to whom the botanical world is ſo much indebted, for the zeal and extraordinary liberality he conſtantly manifeſted, in advancing the ſcience) received this plant from China at the ſame time with A. aurea, A. radiata, &c. about the year 1777. It is rather a ſcarce and tender bulb, as it is ſubject to rot by overmuch wet. It has hitherto been kept, as are moſt plants on their firſt arrival from China, in the hot-houſe; but, from every appearance, we ſhould be led to ſuppoſe, it would not periſh if kept in the Green-houſe, as we queſtion much, whether it is not equally hardy with the Guernſey Lily, and a native, originally, as well as the latter, of Japan.

It ſhould be planted in ſandy loam, with a ſmall quantity of rough peat, above the tiles in the pot, to make it flower. The propagation is from offsets, which are produced but rarely from the old bulbs. Our figure was taken from a plant in the Hammerſmith nurſery this year, 1801, in the month of May.

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Amaryllis Fothergillia.

PLATE CLXIV.

GALAXIA GRANDIFLORA.

Large-flowered Galaxia.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

SPATHA univalvis. Corolla monopetala, 6 fida, tubus filiformis. Stigma multipartita.

SHEATH of one valve. Bloſſom one petal, 6-cleft, tube thread-ſhaped. Summit many diviſions.

See GALAXIA OVATA, Pl. XCIV. Vol. II.

SPECIFIC CHARACTER.

Galaxia foliis canaliculatis, acuminatis, arcuatis; corolla magna, lutea, folia æquantia.

Galaxia with channelled leaves, tapered to the point, and arched; bloſſom large, yellow, and the length of the leaves.

REFERENCE TO THE PLATE.

1. The ſheath of the bloſſom.
2. A Bloſſom ſpread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summit, the ſummit detached, magnified.

THE figure of this delicate little bulb was taken from a plant in the Hibbertian Collection, which had been imported in the laſt, and flowered in February this year 1801. It is a tender plant, and the roots are very ſubject to decay after flowering, for which reaſon, they ſhould be removed from the pot before the leaves are quite decayed. Mr. Allen informs us he has kept it, in the greenhouſe, with the other Cape bulbs, planted in light ſandy peat earth.

Galaxia grandiflora

PLATE CLXV.

ECHIUM GLAUCOPHYLLUM.

Sea-green-leaved Viper's-Bugloſs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla irregularis, fauce nuda.	Blossom irregular, mouth naked. See Echium grandiflorum, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium caule fruticoſo; ramis calycibuſque glabris; foliis ovato-lanceolatis, glaucis, glabris, margine ſerrulatis; corollis ſubæqualibus.	Viper's-Bugloſs with a ſhrubby ſtem; branches very ſmooth; leaves between egg and lance-ſhaped, of a ſea-green colour, ſmooth, and ſlightly ſawed at the margin; bloſſoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, to ſhew the inſertion of the chives.
3. The Seed-bud, Shaft, and Summit, magnified.

This ſhrubby ſpecies of Echium was introduced, to the Royal Gardens at Kew, by Mr. F. Maſſon, in the year 1792, from the Cape of Good Hope. It grows to the height of three feet, or more, rather buſhy at the top, flowers about the month of May, and perfects its ſeeds with us; by which only method, it is to be propagated. It thrives beſt in a light loamy ſoil, with a ſmall proportion of ſandy peat, about one fourth.

Profeſſor Martyn, in his Miller's Dic. has collated two deſcriptions of Echiums under the titles of lævigatum, and glabrum; the firſt, No. 9, from Lin. Sp. Plant. 199; the ſecond, No. 19, from Vahl. Symb. 3. 22. Thunberg has likewiſe, in his Prodromus, 33. two names of plants. as E. lævigatum, and E. glabrum; from whom Willdenow, in his new Edition of Sp. Plant. p. 785, has copied them under the same titles; adding, the various ſynonims, from Linnæus's Sp. Plant. to the one; and to the latter, Prof. Jacquin's ſpecific of glaucophyllum, taken from his Ic. rar. 2. t. 312, and his Collect. 2. p. 325. Now, we have little heſitation in declaring our opinion, and we think, thoſe who chooſe to compare our figure with the different deſcriptions here mentioned, will coincide with us, that this is the plant from which they muſt all have originated, except the E. glabrum of Vahl, which we take to be a different plant; as, the cup is deſcribed hairy, the length of the tube of the bloſſom; the chives longer, and the flower ſmaller. Wherefore, we have taken, for our plant, the ſpecific title of Jacquin, as being, in our idea, the moſt appropriate.

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Echium glaucophyllum

PLATE CLXVI.

GLADIOLUS ABREVIATUS.

Shortened-petalled Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla ſexpartita, ringens. Stamina adſcendentia.	Blossom ſix diviſions, gaping. Chives aſcending. See Gladiolus roseus, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, cruciatis, ſcapo longioribus; corolla tubuloſa, ſtriata, ima anguſtata, lacinia ſumma magna, recta, ovata, reliquæ vero parvæ, abreviatæ.	Gladiolus with linear leaves, croſs ſhaped, longer than the flower-ſtem; bloſſom tubular, ſtreaked, and narrowed at the lower part, the upper petal is large, grows ſtraight out, and egg-ſhaped, the others are ſmall, and appear as if ſhortened.

REFERENCE TO THE PLATE.

1. The outer ſheath of the Empalement.
2. The inner ſheath of the Empalement.
3. A Bloſſom ſpread open, with the Chives attached.
4. The Seed-bud, Shaft, and Summits.

This moſt ſingular Gladiolus was received, amongſt a variety of others, in the year 1799, from the Cape of Good Hope, by Meſſrs. Lee and Kennedy, Hammerſmith; at whoſe nurſery it flowered in March, this year 1801, for the firſt time. It is a hardy bulb, and propagates freely from the root; grows about two feet high, and, before flowering, has much the appearance of G. triſtis.

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Gladiolus abreviatus

PLATE CLXVII.

BRUNSFELSIA UNDULATA.

Waved-flowered Brunsfelsia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, quinquedentatum, obtuſum, minimum, perſiſtens.

COROLLA monopetala, infundibuliformis; tubus longiſſimus, ſubincurvus; limbus planus, quinquefidus, obtuſus.

STAMINA. Filamenta quatuor, breviſſima. Antheræ oblongæ, erectæ, filamentis dorſo affixæ.

PISTILLUM. Germen ſubrotundum, parvum. Stylus filiformis, longitudine tubi. Stigma craſſiuſculum.

PERICARPIUM. Capſula extus baccata, globoſa, unilocularis, bivalvis.

SEMINA plurima, compreſſa, hinc convexa, inde angulata, punctato-ſcabra.

RECEPTACULUM fundo capſulæ adnatum, paleaceum; paleis coadunatis, apice ſubulatis, ſemina diſtinguentibus.

EMPALEMENT. Cup one leaf, bell-ſhaped, five-toothed, blunt, very ſmall, remaining.

BLOSSOM. One petal, funnel-ſhaped; tube very long, rather curved; border flat, five-cleft, obtuſe.

CHIVES. Four threads, very ſhort. Tips oblong, upright, fixed by the back to the threads.

POINTAL. Seed-bud roundiſh, ſmall. Shaft thread-ſhaped, the length of the tube. Summit rather fleſhy.

SEED-VESSEL. Capſule on the outſide a berry, globular, one cell, two valves.

SEEDS many, flat, convex on one ſide, angular on the other, roughly punctured.

RECEPTACLE fixed to the bottom of the capſule, chaffy; chaffs joining at the baſe, awl ſhaped at the point, ſeparating the ſeeds.

SPECIFIC CHARACTER.

Brunsfelſia foliis lanceolato-obovatis, utrinque acuminatis, petiolis breviſſimis; tubus parum incurvatus, laciniis limbi undulatis.

Brunsfelſia with leaves between lance and inverſely egg-ſhaped, tapered to both ends, footſtalks very ſhort; tube a little incurved, the ſegments of the border waved.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The tube of the bloſſom cut open, to ſhew the inſertion and character of the Chives.
3. The Pointal and Seed-bud.

THE Genus Brunsfelſia (by Plumier ſo named, in honour of Otho Brunsfels a monk, the firſt who edited in 1530 a Botanical work with good figures, it contained 238 plates) has undergone a very neceſſary reviſion ſince the days of Linnæus; indeed, it appears ſingular that Father Plumier, from whom Linnæus quotes his Generic character, ſhould have committed ſo great an overſight, as to deſcribe it with five chives; a feature ſcarcely to be expected, from a ſport of nature, in plants of this Claſs. So however it is on record, and the fifth Claſs of the Gen. and Spe. Plant. and of the Syſt. Nat. tom. ii. each includes this Genus; from which, we ſhould be induced to think he had deſigned ſome other plant; if the figure, and the reſt of the deſcription, did not confirm it. Schreber, in his Gen. Plant. has likewiſe an obſervation, that the fruit ſhould be named a capſule, rather than a berry; as given by Linnæus, Miller, and Swartz; his reaſon, that it ſplits determinately, by a ſuture, from the top to the baſe.

Our ſpecies, is the third now in Britain; they are all natives of the Weſt India Iſlands. The 1ſt B. americana has been long an inhabitant of our hothouſes; the 2d B. maculata is but little known to moſt, though long cultivated here; as it has been treated as a variety of the firſt ſpecies, notwithſtanding the ſtrong ſpecific difference, in the ſhape of the leaves and bloſſoms; which in the B. maculata, are beautifully marked at the baſe, and as large as the undulata; the leaves inverſely egg-ſhaped and more downy. The preſent plant ſeldom grows more than four feet high, flowers freely about March, is very ſweet ſcented, and is eaſily propagated by cuttings. It was firſt ſent to England in the year 1784, by Mr. Elcock from the Iſland of Barbadoes, to Meſſrs. Lee and Kennedy, Hammerſmith. Our drawing was made from a plant in the Clapham Collection, in March 1800. It ſhould be planted in rich earth.

Brunsfelsia undulata.

PLATE CLXVIII.

GERANIUM PICTUM.

Painted-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM. Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis cordato-oblongis, obtuſis, inequaliter inciſis, tomentoſis, humi adpreſſis; corolla alba, petalis ſuperioribus profundè ſupra medium rubro maculatis; ſtaminibus ſeptem fertilibus; radice tuberoſa.	Geranium with oblong heart-ſhaped leaves, blunt, unequally gaſhed, downy, and lying cloſe to the ground; bloſſom white; the upper petals deeply marked with red about the middle; ſeven fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal, magnified.
3. The Chives ſpread open, magnified.
4. The Seed-bud, Shaft and Summit, magnified.

No Genus of Plants claims our notice, for its beauty, more than Geranium, and this ſpecies, certainly, ranks amongſt the foremoſt. It is a native of the Cape of Good Hope, and we believe only to be found in the Clapham Collection; where, our figure was taken in April this year, from a plant, the bulb or root of which had been received the preceding autumn. It is nearly the only one, amongſt twenty two ſpecies of the tuberous kind, all having irregular petalled bloſſoms and tubular cups, of which we poſſeſs drawings, that has ſeven fertile chives; the greater number have two, four, or five. It appears to flouriſh under the treatment given it by Mr. Allen, which is, by keeping it in ſandy peat, on a ſhelf, very dry, in the green-houſe. The propagation appears to be the ſame for this, as the other tuberous kinds, that is, by the root.

Geranium pictum

PLATE CLXIX.

CRINUM GIGANTEUM.

Gigantic Aſphodel-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſupra, infundibuliformis, ſexpartita, æqualis; filamenta tubi fauci inſerta; ſemina ad baſin corollarum, vivipara.

BLOSSOM above, funnel-ſhaped, ſix-parted, equal; threads inſerted into the mouth of the tube; ſeeds at the baſe of the bloſſoms, viviparous. See CRINUM SPIRALE, Pl. XCII. Vol. II.

SPECIFIC CHARACTER.

Crinum foliis flaccidis, undulatis; floribus ſeſſilibus, umbellatis; petalis concavis, ſubalbidis.

Aſphodel-Lily with flaccid, waved leaves; flowers fitting cloſe to the flower ſtem in umbels; petals concave, nearly white.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the whole plant.
2. A Petal with its chive.
3. The Seed-bud, Shaft, and Summit.

THE coaſt of Africa bordering on our ſettlement at Sierra Leone, has furniſhed us with a number of beautiful plants; but none more ſo, than thoſe of the natural order of Lily; witneſs our preſent figure, which was taken from a plant in the Hammerſmith collection, in the month of Auguſt 1800. The bulbs of this grand ſpecies of Crinum, were received by her Ladyſhip, the Right Honourable the Marchioneſs of Rockingham, about the year 1792, from Sierra Leone; they may be conſidered as hardy hothouſe plants, and may be kept in any part of it; will flower, freely, about the month of Auguſt, the flower-ſtems riſing, ſometimes, to the height of three feet. A mixture, of leaf mould, or ſandy peat one half, and light loam the other, is the beſt compoſt to make them flouriſh. It is propagated from the ſeed, or offsets.——Having made a ſmall alteration, in the Eſſential Character of the Genus; and as it is likely we may figure ſome other ſpecies of Crinums ſhortly; we think it neceſſary to add a few words, to that point. The moſt oſtenſible difference, we have been able to trace, in comparing above 40 ſpecies of Crinums and Amaryllis's, and on which to reſt, with certainty, for generical diſtinction; can, unqueſtionably, be taken only, from the ſeeds; as theſe in moſt ſpecies of Pancratium, Hæmanthus, and all of this Genus, are viviparous or formed like fleſhy bulbs, producing plants, like offsets taken from the original bulbs. From Pancratium it is diſtinct, in being deſtitute of the Honey-cup; and equally ſo from Hæmanthus, which has its ſheath of many leaves, the flowers and chives upright, and the chives, twice the length of the bloſſoms.

Crinum giganteum

PLATE CLXX.

IXIA BULBOCODIUM. *Var. flore speciosissimo.*

Crocus-leaved Ixia. *Var. with most beautiful flower.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stamina tria, erectiuſculo-patula.	BLOSSOM 6-petals, ſpreading, equal. Chives three, upright, ſpreading. See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia ſcapo unifloro; foliis linearibus, canaliculatis, ſcapo æquantibus; corolla declinata, tubo brevi; ſtigmatibus ſextuplicibus.	Ixia with one flower on the ſtem; leaves linear, and channelled, the length of the flower-ſtem; bloſſom declined, with a ſhort tube; ſummits ſextuple.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A Bloſſom cut and ſpread open, with the Chives, ſhewn from the inſide.
3. The ſame, ſhewn from the back or outſide.
4. The Pointal, with the Summits, magnified.

THIS extremely delicate, and beautiful little Ixia, flowered, for the firſt time, in March this year, 1801, in the collection of G. Hibbert, Eſq. Clapham Common; the bulbs having been received the preceding autumn from the Cape of Good Hope. It appears to be one of thoſe plants, which ſeldom ſurvive the ſecond ſeaſon, in this climate; and we much fear, without a freſh ſupply, it will be ſoon loſt to this country; as it does not ripen its ſeeds, and the roots do not ſeem as if inclined to increaſe by offsets.

Iris Bulbocodium
Var flore speciosissimo

PLATE CLXXI.

HYPOXIS LINEARIS.

Linear-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, perſiſtens, ſupera. Capſula baſi anguſtior. Spatha 2-valvis.	Blossom 6-parted, remaining, above. Capſule narrower at the baſe. Sheath 2-valved. See Hypoxis stellata, Pl. CI. Vol. II.

SPECIFIC CHARACTER.

Hypoxis foliis linearibus, glabris, canaliculatis, longiore ſcapo unifloro; corolla intus aurea, extus viridis.	Hypoxis with linear leaves, ſmooth, channelled, and longer than the flower-ſtem, which has but one flower; bloſſom orange within, green without.

REFERENCE TO THE PLATE.

1. Chives and Seed-bud.
2. Pointal and Seed-bud, magnified.
3. The Seed-bud cut tranſverſely.

At firſt, we had ſome doubts whether this plant ſhould not be conſidered as a variety of Hypoxis ſtellata, to which it undoubtedly affines; but, upon due examination, find it a diſtinct and new ſpecies; as well, from the ſhape and length of the leaves, as the ſhape, character, and colour of the bloſſom, and figure of the root.

Like Hypoxis ſtellata it is a native of the Cape of Good Hope, and was introduced, from thence, by Meſſrs. Lee and Kennedy, in the year 1792. For its treatment, &c. we muſt refer our readers to the above ſpecies, Pl. 101. Vol. 2. Our drawing was taken in March 1801 from a plant in the Hibbertian Collection, Clapham Common. The flower of this plant, like many of the Ixias, &c. is expanded but a few hours each day, and that only, whilſt under the influence of a ſtrong morning ſun; as, if the weather is gloomy, it keeps cloſe ſhut, but does not ſpeedily decay, for it will continue to open, with equal brilliancy, for eight or ten days.

Hypoxis Linearis

PLATE CLXXII.

ANEMONE PALMATA.

Cyclamen-leaved Portugal Anemone.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala duorum triumve ordinum, in ſingula ſerie tria, oblongiuſcula.

STAMINA. Filamenta numeroſa, capillaria, corolla dimidio breviora. Antheræ didymæ, erectæ.

PISTILLA. Germina numeroſa, in capitulum collecta. Styli acuminati. Stigmata obtuſa.

PERICARPIUM nullum. Receptaculum globoſum, ſive oblongum, excavato-punctatum.

SEMINA plurima, acuminata, ſtylum retinentia.

EMPALEMENT none.

BLOSSOM. Petals in two or three rows, three in a row, rather oblong.

CHIVES. Threads numerous, hair-like, half the length of the bloſſom. Tips doubled, erect.

POINTALS. Seed-buds numerous, collected into a ſmall head. Shafts tapered. Summits blunt.

SEED-VESSEL none. Receptacle globular or oblong, hollowed and dotted.

SEEDS many, tapered, retaining the ſhaft.

SPECIFIC CHARACTER.

Anemone foliis reniformibus, ſub-lobatis, crenatis; involucro multifido; petalis exterioribus villoſis, majoribus.

Anemone with kidney-ſhaped leaves, a little lobed, ſcolloped; fence many-cleft; the outer petals hairy and larger.

REFERENCE TO THE PLATE.

1. An outer Petal of the Bloſſom, ſhewn from the inſide.
2. The Chives, as they ſtand on the receptacle.
3. The ſmall Head, as formed by the pointals.
4. A Seed-bud and its appendages, a little magnified.

THIS ſpecies of Anemone, is a native of Portugal, having been brought from thence about the year 1788, and firſt cultivated at the Hammerſmith Nurſery; the ſpecific title of Luſitanica obtained for a time, but little doubt reſts now of its being the A. palmata of Linnæus's Sp. Pl. p. 758, and of Vahl, Desfontaines, &c. How the plant could firſt acquire the name of palmata, is certainly a myſtery; unleſs it might be, from the appearance of the fence, which nevertheleſs but ill accords with that character. Bauhin's affination, as Cyclamen-leaved, is certainly the moſt appropriate, as the leaves both in ſhape, and the colour of the upper and under part, are exact with C. coum. It is rather too delicate for our winters, if expoſed in the open borders; but, makes a pretty appearance, in ſpring, if kept in a pot, in light, rich earth. Like moſt Anemonies, it propagates beſt by dividing the roots, which are long and cylindrical; but, care muſt be taken not to water the pots, for ſome time after planting, as they are apt to rot, where they are broken.

Pl. 4

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Arnoseris palmata.

PLATE CLXXIII.

GERANIUM ROSEUM.

Rosy Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM. Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis inciso-lobatis, tomentosis, lobis crenatis, obtusis; pedunculis multifloris; floribus erectis, confertis, roseis, pentandris; calycibus monophyllis; radice tuberosa.	Geranium with deeply-gashed, lobed, downy leaves, the lobes scolloped and blunt; flower-stems many flowered; the flowers erect, crowded, rose-coloured and with five tips; cups one-leaved; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement, with its hollow tube cut open.
2. The Chives cut open.
3. The Seed-bud, Shaft, and Summits.

ABOUT the year 1794, this species of Geranium was first introduced to the Royal Gardens, Kew, by Mr. Francis Masson, from the Cape of Good Hope. Of all the tuberous kind, this is, certainly, the most specious yet in England; it flowers generally about March, in which month, our drawing was made, from a specimen in the nursery of Mr. J. Colville, King's Road, Chelsea. Mr. Colville informs us, that the propagation is very difficult, and only to be performed by the root; as the plant does not produce any branches, and that the seeds do not ripen; he keeps it in a mixture of rotten leaves, and sandy peat, in which, it has every appearance of luxuriant health.

Geranium roseum

PLATE CLXXIV.

ANTHOLYZA TUBULOSA. *Var. flore variegato.*

Tubular Antholyza. *Striped flowered Var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla tubulosa, irregularis, recurvata. Capsula infera.	Blossom tubular, irregular, and bent backward. Capsule beneath. See Antholyza ringens, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza floribus tubulosis, subcylindraceis; scapo disticho, foliis lanceolato-ensiformibus, breviore.	Antholyza with tubular, nearly cylindrical flowers; flower-stem with the blossoms pointing two opposite ways, leaves between lance and sword-shaped, shorter.

REFERENCE TO THE PLATE.

1. A Blossom of a variety, differing in the paleness, and size of the flowers, and without variegation.
2. The Empalement.
3. A flower cut open, with the Chives attached.
4. The Seed-bud, Shaft, and Summits, one Summit magnified.

This fine species of Antholyza was received by Messrs. Grimwood and Wykes, Kensington, from the Cape of Good Hope, in the year 1796; they possess three varieties, and we should have been happy to have given a blossom of the third, but, it was out of flower before our drawing was taken, which was, in the end of June, this year. It is a hardy bulb, and increases freely, either by the seed, or from the root, and should be planted in sandy peat, with a small mixture of loam.

Pl. 5.

Antholyza tubulosa
Var.ᵉ flore rongato

PLATE CLXXV.

MELALEUCA ERICÆFOLIA.

Heath-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many ſets. Many Chives.

GENERIC CHARACTER.

CALYX. Perianthium turbinatum, germini adnatum, quinquefidum ſeu quinquedentatum.

COROLLA. Petala quinque, rotundata, calycis margini interiori inſerta.

STAMINA. Filamenta numeroſa, filiformia, in faſciculos quinque connata. Antheræ incumbentes.

PISTILLUM. Germen turbinatum, fundo calycis adnatum. Stylus filiformis, erectus. Stigma ſimplex.

PERICARPIUM. Capſula ſubgloboſa, calycis ventre corticata, ſummitate nuda, trilocularis, diſſepimentis contrariis.

SEMINA plurima, oblonga, ſeu rotundato-angulata, ſeu alata.

EMPALEMENT. Cup turban-ſhaped, growing to the ſeed-bud, five-cleft or five-toothed.

BLOSSOM. Five petals rounded, inſerted into the inner margin of the cup.

CHIVES. Threads numerous, thread-ſhaped, united in five bundles. Tips incumbent.

POINTAL. Seed-bud turban-ſhaped, growing to the bottom of the cup. Shaft thread-ſhaped, erect. Summit ſimple.

SEED-VESSEL. Capſule nearly globular, coated by the belly of the cup, the upper part naked, three-celled, partitions contrary.

SEEDS many, oblong, or rounded with angles, or winged.

SPECIFIC CHARACTER.

Melaleuca foliis ſparſis oppoſitiſve, linearibus, enerviis, ſubrecurvis, muticis; floribus ſeſſilibus, apicem verſus ramulorum confertis, ſpicatis.

Melaleuca with ſcattered or oppoſite leaves, linear, without nerves, a little turned back and beardleſs; flowers grow cloſe to the ſtem, crowded together near the end of the ſmaller branches in ſpikes.

REFERENCE TO THE PLATE.

1. A Prop, one which is to be found at the baſe of each flower.
2. A Bloſſom, natural ſize.
3. The ſame magnified.
4. One of the five bundles of Chives, with its Petal, to which it is attached at the baſe, magnified.
5. The Cup, Seed-bud, Shaft and Summit, natural ſize, the ſummit detached and magnified.

THE plants from New Holland, of the natural order of Myrti; comprized under the different Genera of Metroſideros, Eucalyptus, Leptoſpermum, Myrtus, and this preſent one of Melaleuca; ſeem, from what we yet know, to conſtitute a very diſtinguiſhed part, of the woody vegetable productions of that country: wherefore, we can have little hopes of ſeeing many of them flower with us, at leaſt, for many years to come. The M. ericæfolia was amongſt the firſt plants raiſed in 1788, by Meſſrs. Lee and Kennedy, Hammerſmith, from ſeeds; but, till this year, we believe it has not been ſeen to flower, in any collection in Great Britain; nor perhaps would it, as yet, had not a large and old plant, been planted out in the novel and elegant conſervatory of the Right Hon. the Marquis of Blandford at White Knights, near Reading, Berks, from a branch of which, obligingly communicated by his Lordſhip, our drawing was taken, the beginning of July, this year.

The Plant grows to the height of ſix or ſeven feet, upright, very branching, the branches weeping, and the flowers, which grow in ſpikes or branches of about ſix inches in length, project, ſtraight out, from about the middle of the ſtem.

It grows beſt in a mixture of two thirds ſandy peat, and one third loam; may be propagated by cuttings made, from the tender ſhoots, in the month of March, and kept under a glaſs, in the tan bed of the hothouſe, or in a melon frame until rooted.

This ſpecies of Melaleuca and the Metroſideros Nodoſa of Gaertner, 1ſt Vol. de fruct. p. 172, t. 34, f. 6, we muſt conſider as the ſame, though made by Dr. Smith, ſee Linn. Tranſ. Vol. III. p. 276, diſtinct ſpecies; perhaps from ſpecimens gathered at different times, differently dried, or from different parts of the country.

Erica ericæfolia

PLATE CLXXVI.

CRATÆVA CAPPAROIDES.

Caper-like Cratæva.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER. *Schreb. Gen. Plant. Vol. I. p. 320.*

CALYX. Perianthium monophyllum, quadrifidum, deciduum, basi planum; laciniis patentibus, ovatis, inæqualibus.

COROLLA. Petala quatuor, oblonga, unguibus tenuibus, longitudine calycis, divisuris inserta.

STAMINA. Filamenta sedecim vel plura, setacea, corolla breviora. Antheræ erectæ, oblongæ.

PISTILLUM. Germen, pedicello filiformi, longissimo, ovatum. Stylus nullus. Stigma sessile, capitatum.

PERICARPIUM. Bacca? carnosa, globosa, maxima, pedicellata, unilocularis, bivalvis.

SEMINA plura, subrotunda, emarginata, nidulantia.

EMPALEMENT. Cup one leaf, four-cleft, falling off, flat at the base; segments spreading, egg-shaped, unequal.

BLOSSOM. Four petals, oblong, claws slender, the length of the cup and inserted into the divisions.

CHIVES. Threads sixteen or more, like bristles, shorter than the blossom. Tips erect, oblong.

POINTAL. Seed-bud on a thread-shaped and very long foot-stalk, egg-shaped. Shaft none. Summit sitting on the seed-bud, headed.

SEED-VESSEL. A Berry? fleshy, globular, large, with a foot-stalk, one-celled, two-valved.

SEEDS many, roundish, notched at the end, dispersed in pulp.

SPECIFIC CHARACTER.

Cratæva foliolis elipticis, glabris; floribus umbellatis, terminalibus, luteo-viridibus, petalis longissimis, apicibus crispis.

Cratæva with eliptical, smooth leaflets; flowers grow in umbels, terminal and yellow green; petals very long, crisped at the ends.

REFERENCE TO THE PLATE.

1. Shews the Pointal, part of the Chives, and three Petals of the blossom; a few of the Chives, one of the Petals, and the leaves of the Empalement, being removed, the better to exhibit the structure of the blossom.
2. The Pointal, complete.

To Mr. Eldred Elfzelius, a native of Sweden, we are indebted for this species of Cratæva; by whom it was brought to Great Britain, on his return from Sierra Leone, in the year 1795. As a native of that burning clime, it will not endure our winters, without the protection of the hothouse; to which, as a climber, it is a considerable ornament, both in foliage, and flower; the flowers coming, in succession, from June, till August; perhaps, much later, as we believe, this is the first time its blossoms have been produced in England. The propagation is extremely easy, by cuttings; but, to give the plant sufficient vigour for flowering, it must be planted in a border, prepared of old rotten dung, sandy peat, and loam, of each, equal parts; separated from the tan-bed by a partition of boards, sufficiently strong to support the earth, upon the removal of the tan. This method of treating many of the tropical climbers, and even the common Caper, though a native of the south of Europe, has been found necessary to their production of flowers in this country. Our figure was taken from a plant, treated in the above manner, in the Stepney collection; from whence, through the kind indulgence of the truly urbanic, and indefatigable proprietor, T. Evans, Esq. we are in hopes of gratifying our botanical friends, with the figures of a number of plants, new to this country; and of which he is, at present, the sole possessor.

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Crataeva cappariodes

PLATE CLXXVII.

IXIA PUNCTATA.

Dotted flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, patens, æqualis. Stigmata 3, erectiuſculo-patula.	Blossom 6 diviſions, ſpreading, equal. Summits three, nearly upright, ſpreading. See Ixia reflexa, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, ſcapo vaginantibus; ſcapus geniculatus, ſubtriflorus; laciniis corollæ obovatis, lineato-punctatis, purpureis.	Ixia with linear leaves ſheathing the ſtem; flower-ſtem jointed, moſtly three flowered; ſegments of the bloſſom inverſely egg-ſhaped, dotted in lines, and purple.

REFERENCE TO THE PLATE.

1. The two valves of the ſheath.
2. A Bloſſom cut open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits; a diviſion of one of the ſummits magnified.

This curious Ixia was introduced from the Cape of Good Hope, in the year 1800, by G. Hibbert, Eſq. and is, we believe, in the poſſeſſion of no other in this kingdom. It is a tender bulb, flowering about April, or May, and appears, either by the bulb, or ſeed, to be ſlow of increaſe. The bulb, from which our figure was taken, was planted in light, ſandy peat earth.

Ixia punctata

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PLATE CLXXVIII.

FERRARIA PAVONIA.

Mexican Ferraria.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

GENERIC CHARACTER. *Schreb. Gen. Plant. V. II. p.* 451.

CALYX. Spathæ binæ, alternæ, carinatæ, involutæ, unifloræ.

COROLLA monopetala, ſupera, ſexpartita; laciniis oblongis, erecto-patentibus, undulato-criſpatis, maculatis; tribus alternis exterioribus latioribus.

STAMINA. Filamenta tria, in tubum cylindraceum, corolla breviorem, connata, ſuperne diſtincta. Antheræ ſubovatæ, didymæ.

PISTILLUM. Germen oblongum, triquetrum, obtuſum, inferum. Stylus filiformis, longitudine tubi.

STIGMATA tria, profundè bifida.

PERICARPIUM. Capſula oblonga, triquetra, trilocularis, trivalvis; diſſepimentis contrariis.

SEMINA numeroſa, ſubrotunda, pulpa involuta.

EMPALEMENT. Sheaths two, alternate, keeled, involute, one-flowered.

BLOSSOM one petal, above, ſix divided; ſegments oblong, upright-ſpreading, criſp-waved and ſpotted; the three alternate outer ones the broadeſt.

CHIVES. Threads three, in a cylindrical tube ſhorter than the bloſſom, joined together, ſeparate at the top. Tips nearly egg-ſhaped, double.

POINTAL. Seed-bud oblong, three-ſided, blunt, beneath. Shaft thread-ſhaped, the length of the tube.

SUMMITS three, deeply two cleft.

SEED-VESSEL. Capſule oblong, three-ſided, three-celled, three-valved; partitions contrary.

SEEDS many, roundiſh, covered with a pulp.

SPECIFIC CHARACTER.

Ferraria corollis ſub campanulatis, ſpecioſiſſimis; laciniis planis, tribus interioribus haſtatis, nectariferis; foliis plicatis, baſi ſpathaceis.

Ferraria with bloſſoms nearly bell-ſhaped and very ſhewy; ſegments plain, the three inner ones are halbert-ſhaped, and have honey-cups, leaves plaited, ſheathing at the baſe.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. An outer Petal of the Flower.
3. An inner Petal of the Flower.
4. The Chives and Pointal.
5. The Chives ſpread open.
6. The Pointal complete, one of the ſummits magnified.

THIS is, without doubt, the Mexican plant given in the 2nd. Vol. t. 31. f. 2. of Swertius's Florilegium, publiſhed in 1612; by F. Hernandez, in his Nov. Plant. &c. Mex. Hiſt. p. 276, in 1648; and of Mutis, under the title it here bears, in his Flo. Amer. 1. t. 15; from whom it has been copied into the Suppl. Plant. of the younger Linnæus, p. 407. and continued by Profeſſor Martyn in his Mill. Dic. Art. Ferraria 2. This Genus, which was originally formed on the Ferraria undulata of the Cape, and placed to the claſs Gynandria by Linnæus, has been ſo continued by Martyn, &c. but upon what grounds, we are unable to determine; unleſs the miſtake aroſe from the impracticability of dividing the tube of the chives, from the ſhaft, in a dried ſpecimen; which, in ſuch tranſitory flowers as thoſe of Ferraria, Siſyrinchium, Galaxia, &c. all of this claſs, ſeem, in that ſtate, to form a perfect uniſon. Schreber has referred theſe Genera, in his Ed. of Linn. Gen. Plant. to where they certainly muſt ſtand, to Monadelphia. But, although we have continued the plant under the title by which it is generally known, from an adherence to our original principle; yet do we think, it equally neceſſary to ſtate our opinion, why we conſider its generical reference to have been as ill taken up, as the Genus had been ill claſſified. This plant, as may be ſeen from our diſſections, is much nigher affined to Siſyrinchium, as it wants every eſſential character of Ferraria, ſuch as a ſheath of one leaf, undulated criſped petals, hooded and fringed ſummits, &c. for we do not conſider the length of the tube of the bloſſom of any moment, as it is not conſtant. Now, every diſtinguiſhing feature of Siſyrinchium are here extant, viz. a ſheath of two leaves, flat or plain petals, ſummits neither hooded or fringed; but our figure will better explain, than words, theſe ſtrong marked differences. If indeed we were to give an opinion, it certainly would not be in coincidence with Thunberg, by placing the whole Genus to Moræa; but to create a new one from this plant; whoſe whole ſtructure, but eſpecially from the Nectaria or honey-cups upon the margin of the inner petals, ſtands eminently diſtinguiſhed from all others.

This moſt diſtinguiſhed plant, was firſt introduced to this country by Mrs. Hudſon of Mancheſter, about the year 1797; but is now found in moſt collections round the Metropolis. It is increaſed by the ſeed, which ripens in this climate, and from the root, which makes abundance of offsets. The flowers expand in rotation, three or four upon each ſtem at the interval of a few days; the ſtem growing to the height of about two feet. So very rapid is the progreſs of the bloſſom in its decay, from the time of its opening, which is generally about ſeven o' clock in the morning; that before twelve, the luſtre is gone, and it is quite decayed by three, or four. Our drawing was made at the Hammerſmith Nurſery in July; and ſtill there were a number of flower ſtems, which had not, as yet, made an appearance of flowering. It is beſt grown in peat earth.

Cereus parvula

PLATE CLXXIX.

AMARYLLIS RETICULATA.

Netted-flowered Lily-Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, campanulata. Stigma trifidum.	Blossom 6-petalled, bell-shaped. Summit three-cleft. See Amaryllis radiata, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis spatha multiflora; corollis reticulatis, purpureis; foliis oblongis, reticulatis, basi attenuatis.	Lily Daffodil, sheath many flowered; blossoms netted and purple; leaves oblong, netted, and tapered at the base.

REFERENCE TO THE PLATE.

1. A Petal and its Chive, attached, as it is in the flower.
2. The Seed-bud, Shaft, and Summit.

The Amaryllis reticulata, a native of Brazil, South America, was first cultivated in the year 1772, at the Hammersmith nursery; the bulbs had been received from Portugal by Edward Whittaker Gray, M.D. of the British Museum; and were by him communicated to Messrs. Lee and Kennedy. Our drawing was made this spring, in May, from a plant in the invaluable, and extensive collection of hothouse plants, at Stepney, belonging to T. Evans, Esq. where it flowers annually.

To ensure the flowering of this plant, it is necessary to plunge the pot in the heat of the bark-bed of the hothouse; and, during the winter months, to keep the earth rather dry, as the bulbs are very subject to rot, without that precaution. It should be planted in a composition of old rotten dung, or leaf mould, and a small proportion of loam.

Maregraffia reticulata

PLATE CLXXX.

ATRAGENE AUSTRIACA.

Auſtrian Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 4-phyllus. Petala. 12. Semina caudata.

EMPALEMENT 4-leaves. Petals 12. Seeds with tails.

See ATRAGENE CAPENSIS, Pl. IX. Vol. I.

SPECIFIC CHARACTER.

Atragene foliis oppoſitis, triternatis; foliolis rugoſis, ſerratis; floribus ſolitariis, tomentoſis, cernuis; calyce magno, cæruleo, marginato.

Atragene with oppoſite, twice-three-divided leaves; leaflets rough and ſawed; flowers ſolitary, downy, nodding; empalement large, blue, and bordered.

REFERENCE TO THE PLATE.

1. A Leaf of the empalement.
2. A Petal of the flower.
3. A Chive complete.
4. The Pointals as they ſtand in the flower.
5. A ripe ſeed, with its feathered tail.

THIS is, unqueſtionably, the Auſtrian Atragene of Jacquin's Vind. 249; and, we think, no one who has had an opportunity of comparing the A. alpina with this plant, but will determine it a diſtinct ſpecies. It is a hardy, climbing ſhrub; growing frequently, eight or ten feet in a ſeaſon, and covers itſelf pretty abundantly with foliage; the foot-ſtalks of the old leaves becoming cirrhi or tendrils, and the wood growing to a conſiderable thickneſs. The flowers begin to appear about May; and continue in ſucceſſion, till July. It may be propagated by layers; but, the ſureſt mode is by ſeed, which may be ſown as ſoon as ripe, and which will be perfected from the firſt flowers, by Auguſt. It grows the moſt flouriſhing in light rich earth; but will live in the moſt common. Our figure was made from a plant in the Hammerſmith collection, to which it was firſt introduced in the year 1792.

Atragene austriaca.

PLATE CLXXXI.

VACCINIUM VIRGATUM.

Green-twigged Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx ſuperus. Corolla monopetala. Filamenta receptaculo inſerta. Bacca quadrilocularis, polyſperma.	Cup ſuperior. Bloſſom one petal. Threads fixed into the receptacle. A berry with four cells and many ſeeds.

See Vaccinium arctostaphyllos. Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis oblongo-ovatis, ſerrulatis, deciduis, ramulis viridibus; floribus, ſub-umbellatis, axillaribus; corollis, ſub-cylindraceis; calycibus apice reflexis. Staminibus decem.	Whortle-berry with oblong egg-ſhaped leaves, ſlightly ſawed, deciduous, the ſmall branches green; flowers grow rather umbelled from where the leaves are fixed to the ſtem; bloſſoms nearly cylindrical; cups reflexed at the upper part. Ten chives.

REFERENCE TO THE PLATE.

1. A flower complete.
2. The Cup.
3. The Chives, Pointal, and Seed-bud, the cup cut off, magnified.
4. A nearly ripe berry.

This ſpecies of Whortle-berry was, according to the Kew Catalogue, introduced by Mr. Young in the year 1770. It is a hardy plant; and, as a native of North America, where it is an under ſhrub of the woods, ſhould be planted in a ſhady ſituation, in peat earth. It is rarely killed by our froſts; grows about two feet high, and loſes its leaves in winter. Our drawing was made in June, this year, at the Nurſery, Hammerſmith, where it is propagated by layers.

Vaccinium virgatum

PLATE CLXXXII.

MALVA DIVARICATA.

Straddling-branched Mallow.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

Calyx duplex; exterior 3-phyllus. Arilli plurimi, monoſpermi.	Cup double; outer three-leaved. Seed-coats many, one-ſeeded. See Malva reflexa, Pl. CXXXV. Vol. II.

SPECIFIC CHARACTER.

Malva foliis lobatis, plicatis, dentatis, ſcabridis; ramis ramuliſque divaricatis, flexuoſis.	Mallow with lobed leaves, plaited, toothed, and rough; the large and ſmall branches grow ſtraddling, and zig-zagged.

REFERENCE TO THE PLATE.

1. The double Cup.
2. A Flower ſpread open, with the threads remaining.
3. The Chives cut open, and magnified.
4. The Seed-bud, Shaft, and Summits, magnified.

As a lively, but little, green-houſe plant, this ſpecies of Mallow has not many equals; and its property of continuing to flower from June, till December, muſt conſiderably enhance its value. It is a native of the Cape of Good Hope, and was introduced to us, about four years ſince. Moſt collections now poſſeſs it, from its facility of increaſe, may be planted in rich earth, and is increaſed by cuttings, or ſeeds, which ripen perfectly in this country. The drawing was made at the Nurſery, Hammerſmith.

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Malva divaricata

PLATE CLXXXIII.

GARDENIA TUBIFLORA.

Tube-flowered Gardenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, ſuperum, laciniis erectis, perſiſtentibus.

COROLLA monopetala, infundibuliformis; tubus cylindricus, calyce longior; limbus planus, quinquepartitus.

STAMINA. Filamenta nulla. Antheræ quinque, ore tubi inſertæ, lineares, ſtriatæ, longitudine dimidia limbi.

PISTILLUM. Germen inferum. Stylus filiformis ſeu clavatus. Stigma exſertum, ovatum, obtuſum, bilobum, ſæpe ſulcatum.

PERICARPIUM. Bacca ſicca, uni bis ſeu-quadrilocularis.

SEMINA plurima, depreſſa, per ſeries imbricatim ſibi impoſita.

EMPALEMENT. Cup one leaf, five-cleft, above, ſegments upright, permanent.

BLOSSOM one petal, funnel-ſhaped; tube cylindrical, longer than the cup; border flat, five diviſions.

CHIVES. Threads none. Tips five, fixed into the mouth of the tube, linear, ſtriped, half the length of the border.

POINTAL. Seed-bud beneath. Shaft thread-ſhaped or club-ſhaped. Summit ſtanding out, egg-ſhaped, obtuſe, two-lobed, often furrowed.

SEED-VESSEL. A dry berry, one, two, or four-celled.

SEEDS many, flattened, lying upon one another in tiers.

SPECIFIC CHARACTER.

Gardenia inermis; foliis elipticis, undulatis, floribus ternis; corollæ laciniis tortis, linearibus, reflexis, tubo filiformi, longiſſimo.

Gardenia without thorns; with eliptical, undulated leaves; flowers grow by threes; the ſegments of the bloſſom are twiſted, linear, reflexed, the tube thread ſhaped, very long.

REFERENCE TO THE PLATE.

1. The Cup and Seed-bud.
2. A Bloſſom cut open, with the Chives remaining at the mouth.
3. The Shaft and its Summit, the ſummit detached and magnified.

THE Tube-flowered Gardenia was introduced to Britain, in the year 1789, from Sierra Leone, and muſt, therefore, be treated as a tender hot-houſe plant. It grows, with us, to the height of about two feet before it flowers; and, from the beauty and ſize of the leaves, the regular, oppoſite manner in which it forms its branches, becomes a very handſome ſhrub. The flowers, which are produced in July, grow generally three together, at right angles, from the inſertion of the leaves, in a bunch, which laſts about ſix or eight days, having but one flower open and perfect at a time, the decaying ones becoming brown. It is propagated, with eaſe, by cuttings, made in the month of March, and kept under a bell-glaſs, in a pot of ſtiffiſh loam, in the bark-bed of the hot-houſe, or a melon frame. The agreeable character, of a delicate fragrance, attendant on the bloſſoms of moſt ſpecies of this genus, is eminently powerful in this. Our drawing was made at the Hammerſmith nurſery; where, it was firſt raiſed, from ſeeds received in a preſent, by Meſſrs. Lee and Kennedy, from the Hon. Sierra Leone Company.

Gardenia tubiflora

PLATE CLXXXIV.

PERGULARIA MINOR.

Smaller Pergularia, or Weſt-coaſt Creeper.

CLASS XX. ORDER VI. *of Linn. Gen. Plan.* 1764.

GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, erectum, acutum, perſiſtens.

COROLLA monopetala, hypocrateriformis; tubus cylindricus, calyce longior; limbus quinquepartitus, planus; laciniis oblongis.
Nectarium, duplex; *exterium* quinquefidum, quinquedentatum, plicato-angulatum, dentibus acutis, incurvis, apice corniculis nutantibus, approximatis; *interium* quinquefidum, exteriori baſi adnatum, ſquamulæ membranaceæ, apice denticulatæ, obtuſæ, fingula involvens ſtamina duo, alterna.

STAMINA. Filamenta decem, capillaria, brevia, divaricata, per paria adnexa glandulis quinque ſtigmati affixis. Antheræ pellucidæ, luteæ, ſubrotundæ.

PISTILLUM. Germina duo oblonga. Stylus breviſſimus, carnoſus. Stigma corpuſculum conicum, obtuſum, carnoſum.

PERICARPIUM. Folliculi duo, uniloculares, introrſum dehiſcentes per longitudinem.

SEMINA numeroſa, parva, ſubrotunda.

EMPALEMENT. Cup one leaf, five-cleft, upright, pointed and remaining.

BLOSSOM one petal, ſalver-ſhaped; tube cylindrical, longer than the cup; border five-divided, flat, ſegments oblong.
Honey-cup, double; *the outer*, five-cleft, five toothed, plaited into angles, with the teeth pointed, incurved, approaching at the point by ſmall nodding horns; the *inner* five-cleft, growing to the baſe of the outer, ſcales ſkinny, toothed at the end, blunt, each covering two oppoſite chives.

CHIVES. Threads ten, hair-like, ſhort, ſtraddling, connected by pairs to five glands fixed to the ſummit. Tips tranſparent, yellow, roundiſh.

POINTAL. Seed-buds two, oblong. Shaft very ſhort, fleſhy. Summit a conical, obtuſe, fleſhy ſubſtance.

SEED-VESSEL. Two follicles, one-valved, ſplitting lengthways from the inſide.

SEEDS numerous, ſmall, roundiſh.

SPECIFIC CHARACTER.

Pergularia foliis cordatis, acutis, apicibus tortis; laciniis corollæ ovatis, erectis, luteis.

Pergularia with heart-ſhaped leaves, ſharp-pointed and twiſted at the ends; the ſegments of the bloſſom are egg-ſhaped, upright, and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A flower cut open.
3. The parts of fructification magnified.
4. Two Scales of the honey-cup as they are attached together, magnified.
5. An outer Scale magnified.
6. An inner Scale magnified.
7. The Seed-buds, Shaft, Summit, and Chives magnified.

THAT a juſt judgment may be formed, upon what grounds we have taken up a ſpecific diſtinction, between the only two ſpecies we poſſeſs of this genus; ſo diſſimilar in our opinion, but, which have been conſidered as ſcarcely to be deemed varieties, by much abler botaniſts than ourſelves profeſs to be; we have given the figures of both in conſequence. Much is it to be regretted, that the whole natural order of plants forming the Apocineæ of Juſſieu, ſo characſtered in themſelves, have not undergone a proper reviſion, in claſſification, upon the original Linnæan sexual principles; which, we muſt ſuppoſe, have been left in the preſent bewildered chaos, from the intricacy, ſingularity and minuteneſs of the parts, being ſo difficult to develope. From critical and actual obſervations, taken from the living plants, we are in hopes of being able to illuſtrate, and correct where neceſſary, the characters of ſuch as may come under our review.

Upon the changing the claſs of this genus, there needs no comment; as moſt authors seem to allow, though they have not followed the hint, that it is properly Gynandrous; although they have not equally agreed as to the Order; ſome taking the glands, ſurrounding the ſummit, for the chives, and ſome, for the ſummits themſelves, of a columnar ſhaft. Dr. Smith, who has figured our other ſpecies, has juſtly taken, the parts fixed to the five glands, for what they certainly are; as may be eaſily traced through the whole order of Orchideæ, where the chives are nearly ſimilarly placed and ſo hooded.

The Genus is by no means new, in name, having been ſo titled by Linnæus, from the names of Pergulans and Pergulanus of Burman and Rumphius; who derived them from the uſe made of the plants by the natives, of the weſtern coaſt of the peninſula of India; where, they are cultivated to form arbors, for the agreeable flavour of their flowers. This ſpecies was firſt introduced about the year 1784, by Sir Joſeph Banks, Bart. ſome time before the other ſpecies; wherefore, we have given it the preference. It is propagated by cuttings, and ſhould be treated in the ſame manner as directed for the Cratæva capparoides of our laſt Number, to have it flower in perfection. The figures of both ſpecies were taken, in Auguſt, from two plants in the collection of J. Vere, Eſq. Kenſington Gore; where, Mr. Anderſon (to whom we muſt beg our ſincere acknowledgments for his frequent and ready obſervations and aſſiſtance) informs us, they are treated in ſuch manner.

Pergularia minor.

PLATE CLXXXV.

PERGULARIA ODORATISSIMA.

Sweet Pergularia, or Chineſe Creeper.

CLASS XX. ORDER VI. *of Linn. Gen. Plant.* 1764.

GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium duplex, genitalia involvens; ſquamulæ *exteriores* quinque, cuſpidatæ; quinque *interiores*, membranaceæ, ſingula ſquamula occultans ſtamina duo alterna.

COROLLA hypocrateriformis.

CONTORT. Honey-cup double, concealing the parts of fructification; the *outer* ſcales are five, and ſpear-ſhaped; the five *inner* are ſkinny, each ſcale covering two alternate chives.

BLOSSOM ſalver-ſhaped.

See PERGULARIA MINOR, Pl. CLXXXIV. Vol. III.

SPECIFIC CHARACTER.

Pergularia foliis cordatis, ſenioribus ſubtomentoſis; laciniis corollæ margine revolutis, tortis, linearibus, reflexis, viridibus.

Pergularia with heart-ſhaped leaves, the older ones rather downy; the ſegments of the bloſſom rolled back at the margin, twiſted, linear, reflexed, and green.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom.
3. The ſame, cut open.
4. The parts of fructification, as they appear when covered by the honey-cups, magnified.
5. The outer ſcale of the Honey-cup, magnified.
6. The inner ſcale of the Honey-cup, magnified.
7. The two Scales, as they are connected together at the baſe.
8. The Pointal, with the Chives; the Shaft, Summit, and Chives, with the bodies connecting the Chives, detached and magnified.

THIS ſpecies of Pergularia is a native of China, from whence it was received in the year 1789, by Lady Hume; in whoſe collection at Wormleybury, Herts, it firſt flowered in 1791. It is cultivated and increaſed in the ſame manner as the P. minor, and is equally fragrant. We have little doubt that our two ſpecies compriſe four, of the different authors who have collated from each other; we ſhall take the laſt, Willdenow. The P. glabra and P. Japonica as our P. minor; and the P. purpurea and tomentoſa as our P. odoratiſſima. The P. edulis of Thunberg is certainly Cynanchum.

Pergularia odoratissima

PLATE CLXXXVI.

IXIA SPECIOSA.

Deep crimſon Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſexpetala, patens, æqualis. Stamina tria, erectiuſculo-patula.

BLOSSOM ſix petals, ſpreading, equal. Chives three, upright ſpreading.
See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, medio coſtatis, gramineis; ſcapus biflorus, filiformis; corollis ſubcampanulatis, profunde coccineis.

Ixia with linear leaves ribbed in the middle and graſſy; flower-ſtem two-flowered and thread-ſhaped; bloſſoms rather bell-ſhaped and of a deep crimſon.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open.
3. The Pointal, one of the tips magnified.

ALTHOUGH this ſpecies is not ſcarce, yet, from the general method of treating it, that is, by giving it no more heat than has been found neceſſary for the generality of Cape Ixias, few have ſeen its bloſſoms, though they poſſeſs the roots. To enſure their flowering, as ſoon as the bulbs are well rooted, which will be about January, if planted in October; they may be then put into the heat of a melon or cucumber frame, or taken into the hothouſe, where they will flower about the latter end of May. This Ixia was firſt introduced, from Holland, about the year 1778, under the name of Ixia Kermoſina ſpecioſa; and, under that title, is to be found, in moſt collections; wherefore, conſidering it a diſtinct ſpecies, having drawings of two varieties, we have continued the ſpecific name of ſpecioſa. Our drawing was made at the Hammerſmith nurſery, in May 1799.

Ixia speciosa.

PLATE CLXXXVII.

ECHITES SUBERECTA

Oval-leaved Echites.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, acutum, parvum.

COROLLA monopetala, infundibuliformis; limbus quinquefidus, planus, patentiſſimus. *Nectarium* glandulis quinque, germen circumſtantibus.

STAMINA. Filamenta quinque, tenuia, erecta. Antheræ rigidæ, oblongæ, acuminatæ, apice convergentes.

PISTILLUM. Germina duo. Stylus filiformis, longitudine ſtaminum. Stigma oblongo-capitatum, bilobum, glutine antheris adnexum.

PERICARPIUM. Folliculi duo, longiſſimi, uniloculares, univalves.

SEMINA plurima, imbricata, coronata pappo longo.

EMPALEMENT. Cup five-parted, pointed, and ſmall.

BLOSSOM one-petal, funnel-ſhaped; border five-cleft, flat and ſpreading very much. *Honey-cup* five glands, ſtanding round the bud.

CHIVES. Five threads, ſlender, erect. Tips ſtiff, oblong, tapered, and cloſing together at the top.

POINTAL. Seed-buds two. Shaft thread-ſhaped, the length of the chives. Summit oblong-headed, two-lobed, attached to the tips by a glutinous ſubſtance.

SEED-VESSEL. Two follicles, very long, one celled, one valved.

SEEDS many tiled, crowned with a long feather.

SPECIFIC CHARACTER.

Echites pedunculis racemoſis; foliis ovalibus, obtuſis, mucronatis; floribus luteis, ampliſſimis; corollæ tubus hirſutus.

Echites with bunched foot-ſtalks; leaves oval, blunt and pointed at the ends; flowers yellow and very large; the tube of the bloſſom hairy.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Flower cut open, with the chives remaining, but detached from each other.
3. The Chives and Pointal as they are in the flower, the lower part of the bloſſom remaining, the upper cut away, magnified.
4. One of the Chives a little magnified.
5. The Pointal and Seed-buds, magnified.

THE Lady Dowager De Clifford received this plant from the iſland of St. Vincent's, in the year 1794; and we much queſtion, whether it was ever ſeen in Britain prior to that period; although ſaid to be cultivated in 1759, by Millar, in the 7th Edit. of his Dictionary, and from thence, collated into the Kew Catalogue, p. 289, Vol. I. It is a climbing plant, if ſupported; but does not grow to any conſiderable height, if kept in a pot. The beſt method of treating this plant, is the ſame as that propoſed for the Cratæva capparoides, Pl. 176. Vol. III. The ſpecific name Suberecta, of Jacquin and Browne, muſt undoubtedly have been taken from the plants which grow in the Savannas; where, they ſeldom acquire above the height of two feet. The whole plant, from which, if any part is cut or broken, there iſſues a milky ſubſtance, is conſidered by Dr. Browne as poiſonous. Our figure was taken at Meſſrs. Lee and Kennedy's, this year, in Auguſt. It is propagated by cuttings, put in about the month of May.

Eschtes suberecta

PLATE CLXXXVIII.

GLADIOLUS CAMPANULATUS.

Bell-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla ſexpartita, ringens.	Blossom ſix diviſions, gaping.
Stamina adſcendentia.	Chives aſcending.

See Pl. XI. Vol. I. Gladiolus roseus.

SPECIFIC CHARACTER.

Gladiolus foliis lanceolatis, nervoſis, glabris; ſcapo ſubtrifloro, foliis longior; corolla ſubcampanulata, palidè purpurea, laciniis ſubæqualibus; ſtigmatibus bifidis.	Gladiolus with lance-ſhaped leaves, nerved and ſmooth; flower-ſtem moſtly three-flowered, longer than the leaves; bloſſom rather bell-ſhaped, of a pale purple, the ſegments nearly equal, with the ſummits two-cleft.

REFERENCE TO THE PLATE.

1. The Sheaths of the Empalement.
2. A Flower ſpread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits, one Summit detached and magnified.

The Bell-flowered Gladiolus, was amongſt the number of thoſe imported from Holland, in the year 1794, by Meſſrs. Lee and Kennedy, Hammerſmith; when they partook of that large collection, brought to Haarlem by a Frenchman; who had been long reſident at the Cape of Good Hope, where he had cultivated moſt of the bulbs prior to his bringing them to Europe. Nothing particular is required for the management of this, more than the moſt common of the Genus, from the Cape. It flowers in May, and increaſes by the root; the ſeeds rarely ripen.

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adictus campanulatus

PLATE CLXXXIX.

ZINNIA VERTICILLATA.

Double Zinnia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum. Pappus ariſtis 2 erectis. Calyx ovato-cylindricus, imbricatus. Floſculi radii 5, perſiſtentes, integri.

RECEPTACLE chaffy. Feather with 2 upright awns. Empalement cylindrical-egg-ſhaped, and tiled. Florets of the ray 5, remaining and entire.

See ZINNIA VIOLACEA. Pl. LV. Vol. I.

SPECIFIC CHARACTER.

Zinnia foliis verticillatis, ſeſſilibus; floribus pedunculatis; floſculi radii ſæpe tria ſeries.

Zinnia with leaves growing in whorls without foot-ſtalks cloſe to the ſtem; flowers with foot-ſtalks; the florets of the ray often three rows.

REFERENCE TO THE PLATE.

1. An outer female Floret of the ray, the ſeed attached, a little larger than nature.
2. An inner hermaphrodite Floret of the diſk, with its ſeed and ſkinny chaff, magnified.
3. The Chives, Pointal, and Seed of an hermaphrodite Floret, diveſted of its corolla, magnified.

THE Engliſh ſpecific title to this plant, ſhould ſeem to imply, that the flowers are ſuch, as ſhould not come into our arrangement; but, as the character is not conſtant in all the flowers, even on the ſame plant, it cannot be conſidered but as a ſpecific character in this particular ſpecies, though the name has its proper force, in contradiſtinction to its congeners, in our language. It is a native of Mexico, South America; and was introduced to our gardens about the year 1789, by Mons^r Richard, from the Paris gardens, at the ſame time with the Virgilia; a moſt beautiful annual, of the habit of Arctotis, now loſt in both countries from the difficulty of procuring ripened ſeeds. It is to be raiſed in the ſame manner as the other ſpecies, on a gentle hot-bed, in March, and planted out the beginning of May. The flowers make their appearance about the beginning of Auguſt, and continue, in ſucceſſion, till they are deſtroyed by the froſt. To be certain of the ſeed, the heads muſt be taken from the plant, whilſt they appear yet freſh; as the petals are perſiſtent, and have not the appearance of entire decay, though the ſeed is nearly ripe; for if the receptacle once begins to rot, (which it is very ſubject to,) the ſeeds are immediately contaminated and ſpoilt. Our figure was taken, this year, at the Hammerſmith Nurſery, where, it was grown firſt in this kingdom.

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Zinnia verticillata

PLATE CXC.

GERANIUM ASTRAGALIFOLIUM.

Aſtragalus-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque.	One POINTAL. Five Summits.
FRUCTUS roſtratus, penta-coccus.	FRUIT furniſhed with long awns; five dry berries.
	See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis pinnatis, hirſutis, foliolis rotundato-ovatis; calycibus monophyllis; petalis undulatis ad baſin tortis; ſtaminibus quinque fertilibus; radice tuberoſa.	GERANIUM with winged, hairy leaves; leaflets of a roundiſh-oval ſhape; cups one-leaved; petals waved, twiſted at the baſe; five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal.
3. The Chives ſpread open and magnified.
4. The Seed-bud, Shaft, and Summits, magnified.

By the Kew Catalogue we are informed, that this ſpecies of Geranium, was introduced to this country, in the year 1788, by Mr. F. Maſſon. It is, like many of this branch of the extended family of Geranium, rather a tender Green-houſe plant; and will not flower, in perfection, without the aſſiſtance of the Hot-houſe. It loſes its foliage after flowering, and remains in a ſtate of inaction for at leaſt three months; during which period, it ſhould be watered but ſeldom, and that ſparingly. To propagate it, the only mode is, by cutting ſmall portions of the root off, and putting them into the ſtrong heat of a hot-bed, about the month of March; as hitherto, it has not perfected any ſeeds with us, and the plant produces no branch, except the flower-ſtem may be ſo denominated. Our drawing was made from the Clapham Collection, in July, this year. This ſpecies has been conſidered by Profeſſor Martyn, (ſee his edition of Mill. Dict. article Pelargonium 2.) as the ſame with G. pinnatum, and G. prolificum of Linn. Sp. Plan. But, however, the ſpecific characters in Linnæus, of thoſe ſpecies, may agree with our figure, the G. Aſtragalifolium of Jacquin and Cavanilles, they are, unqueſtionably, all different plants; drawings of the two former we have, and will be given in due courſe.

Geranium astragalifolium

PLATE CXCI.

PLATYLOBIUM SCOLOPENDRUM.

Scolopendra-like ſtemmed Flat-Pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two Sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium, campanulatum quinquedentatum; laciniis tribus inferioribus acutis, patentibus; duabus ſupremis maximis, obtuſis, obovatis, vexillo adpreſſis.

COROLLA papilionacea.

Vexillum, obcordatum, emarginatum, erectum, maximum.

Alæ vexillo breviores, obtuſæ, ſemi-obcordatæ, baſi denticulatæ.

Carina obtuſa, compreſſa, longitudine et figura alarum.

STAMINA filamenta decem, coalita in vaginam, ſupra ſemifiſſam, apice libera, æqualia, aſſurentia. Antheræ ſubrotundæ, verſatiles.

PISTILLUM. Germen lineare, piloſum. Stylus incurvatus, glaber. Stigma ſimplex.

PERICARPIUM. Legumen pedicellatum, compreſſum, obtuſum, mucronatum, uniloculare, dorſo alatum.

SEMINA, plurima, compreſſa, reniformia.

EMPALEMENT. Cup bell-ſhaped, five-toothed; the three lower ſegments pointed, ſpreading; the two upper very large, obtuſe, preſſed to the ſtandard.

BLOSSOM butterfly-ſhaped.

Standard, inverſely heart-ſhaped, notched at the end, upright, very large.

Wings ſhorter than the ſtandard, obtuſe, half inverſely heart-ſhaped, toothed at the baſe.

Keel, obtuſe, flattened, the length and ſhape of the wings.

CHIVES. Ten threads, united into a ſheath, half cleft on the upper ſide, ſeparate at the top, equal and turned upwards. Tips roundiſh, verſatile.

POINTAL. Seed-bud linear, hairy. Shaft turned inwards, ſmooth. Summit ſimple.

SEED-VESSEL. Pod with a footſtalk, flattened, obtuſe, with a ſmall point, one-celled, winged along the back.

SEEDS many, flattened, kidney-ſhape.

SPECIFIC CHARACTER.

Platylobium foliis ovatis, glabris; ramis ramuliſque compreſſis, alatis, margine, cicatriſatis, floribus ſolitariis.

Flat-pea with egg-ſhaped ſmooth leaves, larger and ſmaller branches flat, winged and hatched at the edges; flowers ſolitary.

REFERENCE TO THE PLATE.

1. The Empalement, natural ſize.
2. The Standard of the bloſſom.
3. One of the Wings of the bloſſom.
4. The two petals of the Keel.
5. The Chives and Pointal, with part of the cup, magnified.
6. The Seed-bud magnified.

THIS Genus of plants was firſt named by Dr. Smith, in the Linn. Trans. Vol. II. 350, from the P. formoſum, which he afterwards figured in the New-Holland ſpecimens, Tab. VI. Our ſpecies was introduced, to Britain, in the year 1792, by Meſſrs. Lee and Kennedy. It is a hardy greenhouſe plant; but has not, hitherto, been increaſed in this country. It muſt be planted in very ſandy peat earth, and not much watered, in winter, as too much wet is apt to deſtroy it. The young branches, which in the old plant appear much more like leaves, (as ſeldom any leaves are produced from the upper part of the plant, after a certain age,) are very tender; but in time become as tough as leather, and are almoſt equally pliable. Our drawing was taken in May 1799, from a plant, we believe, the firſt that flowered in England, in the Hibbertian Collection.

Platylobium scolopendrium.

PLATE CXCII.

ANTHOLYZA FULGENS.

Refulgent-flowered Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla tubulosa, irregularis, recurvata. Capsula infera.	Blossom tubular, irregular and bent backward. Capsule beneath.

See Antholyza ringens, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza floribus tubiformibus, curvatis, coccineis, fulgentibus; laciniis corollæ maximis, patentibus; foliis longissimis, glabris, basi attenuatis.	Antholyza with trumpet-shaped flowers, curved, scarlet, and refulgent; the segments of the blossom very large, spreading; leaves very long, smooth, and tapered at the base.

REFERENCE TO THE PLATE.

1. Part of a Leaf, cut from the upper part.
2. The two sheaths of the Empalement.
3. The Flower cut open, with the chives attached.
4. The Pointal and Seed-bud; one of the summits detached and magnified.

This most beautiful genus does not possess amongst its numerous species, (drawings of twenty-two of which we have) a rival to A. fulgens; whether, for the size of the plant, which grows to the height of three feet, or the extreme brilliancy of its blossoms, which frequently make a spike near a foot in length. The roots should not be taken from the pots, but shifted into fresh earth annually, which may be a composition of half sandy peat, and half loam, as the leaves do not decay, until fresh ones are produced. Our figure was taken at the Hammersmith Nursery, in May 1800, to which it was first brought, from the Cape of Good Hope, in 1792. It increases by the root.

In a cotemporary, and something similar publication to our own, we were sorry to observe, a rising itch to do away, what, under the conduct of its original scientific proprietor, was allowed by all, to constitute its chief merit and utility; especially to those, "*who wish to become scientifically acquainted with the plants they cultivate.*" The late Mr. Curtis, pursuing the path he planned, with rigour, to prevent confusion, and avoid as much as possible the greatest difficulty of the science; seldom altered a commonly known, or established name; unless absolutely necessary to systematic arrangement. We were naturally led to these obvious observations, from the hints thrown out in the last Number of the Bot. Mag. in which, the A. tubulosa of all the collections, which possess the plant, and so named and figured by us, in the preceding Number of the Botanists Repository, has a new generic and specific title; and in which a gentleman "*with INFINITE skill*" of the name of Gawler, the acknowledged father of the innovation, is spoken of a s qualified to scrutinize and rectify the "*errors, false synonims, and blunders upon blunders, which have from carelessness,* &c." crept into the, of course, insignificant labours of a Linnæus, a Jacquin, a Thunberg, a Willdenow, or a Curtis. It may perhaps be an acquisition to the science, that, since such confusion prevails amongst "*the most learned Botanists,*" from their "*acknowledged inability to determine those plants;*" which, nevertheless, they have all foolishly attempted to do, we have one at last, whose "*scrutinizing*" eye "*has been able to make out all Linnæus's and even Thunberg's species.*" This elucidation, of so intricate a subject, by a person whose knowledge of living plants, we fear, does not lead him, scarcely, to an acquaintanceship with the difference of face in a Plane from a Poplar, must be matter of infinite moment, to those, "*who wish to become acquainted with the plants they cultivate*;" and the small trouble, to most persons, of learning new, and ousting the old names for plants, which have been long rivetted to the memory by habitual use, will be amply compensated, by the pleasure of novelty, which must necessarily result, from the certain alteration in some part of the title, of every plant which has hitherto, or is to come under, this learned judge's dictatorial fiat. Our opinions, as do our labours, run counter to these new fashions, of rendering a difficult science easy; and our road must still be in the old track of the trifler Linnæus.

Anthericja fulgens.

PLATE CXCIII.

GERANIUM LINEARE.

Linear-petalled Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque.	One POINTAL. Five Summits.
FRUCTUS roſtratus, 5-coccus.	FRUIT furniſhed with long awns; five dry berries.
	See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis lanceolatis, obtuſis, ſubſinuatis; petalis ſubæqualibus, linearibus; floribus pentandris; radice tuberoſa.	GERANIUM with leaves lance-ſhaped, obtuſe, and a little ſcolloped at the edges; petals nearly equal, linear; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its hollow ſtructure.
2. The Chives and Pointal natural ſize.
3. The Chives ſpread open, magnified.
4. The Pointal, magnified.

THIS is another of thoſe curious tuberous Geraniums, which have been introduced, to this country, by Mr. Niven; who was ſent to the Cape of Good Hope by G. Hibbert, Eſq. for the ſole purpoſe of enriching his Gardens and Herbarium, (now, we preſume, the firſt in Europe) with the vegetable productions of that country. It has no apparent difference, in habit, to require any other treatment than has been mentioned in the former part of this work, as neceſſary to the reſt of its congeners. Our drawing was taken, from the Clapham Collection, in July 1801; the roots having been received the preceding autumn.

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Geranium lineare

PLATE CXCIV.

HEMEROCALLIS ALBA.

White Day-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla campanulata; tubo cylindrico. Stamina declinata.	Blossom bell-shaped; tube cylindrical. Chives declining.

See Hemerocallis cærulea, Pl. VI. Vol. I.

SPECIFIC CHARACTER.

Hemerocallis foliis cordatis, petiolatis; corolla alba, tubo longissimo.	Day-Lily with heart-shaped leaves that have foot-stalks; blossom white, tube very long.

REFERENCE TO THE PLATE.

1. The Chives and Pointal, as they are placed in the flower.
2. The Seed-bud, Shaft, and Summit.
3. A ripe Seed-vessel of its natural size.
4. The Seed-vessel cut transversely, to shew the situation and number of the cells and valves.
5. A ripe Seed, natural size.

The White Day-Lily is from the same country, and of the same date in our gardens, as the Blue; figured in the First Vol. Pl. VI. and was introduced through the same medium. It is herbaceous, and generally flowers, if kept in the hot-house, about August; having that true and constant character of the genus, and from which it had its name, the producing but one solitary, perfect flower, per diem, till all the blossoms on the spike are exhausted; which, in this species, are much more abundant than in any of the others. It is increased by the root or seed.

This plant, we presume, is the same as those specified under the different titles of Lilium Longiflorum, and L. Japonicum, in Willdenow's new edition of the Species Plant.; the L. candidum, and L. Japonicum, of Thunberg's Japan; and the L. Longiflorum of the Linn. Transf. Vol. II. P. 333. The Hemerocallis formerly figured by us, under the specific title of Cærulea, we take to be, the Hemerocallis Japonica, and Lilium Cordifolium of Willdenow; the H. Cordata of Thunberg's Japan; and the Hemerocallis Japonica, and Lilium Cordifolium of the Linn. Transf. Vol. II. p. 332. Willdenow, who had never seen even dried specimens of the plants in question, has hence been led to place the same plant, under different genera; and to consider the Hemerocallis of the Botanists Repository, as only a variety of H. Japonica, but still admitting it as an Hemerocallis. Now, as we have no doubt, (nor do we think any one can, that will take the trouble to examine the dissections given with each figure,) that if the one is an Hemerocallis, the other must be admitted of the same family; so, have we made no scruple in rejecting the generic name of Lilium, for the present plant; although we would gladly have adopted the specific one of Longiflora, had not that of Alba, already obtained so generally in our gardens; a rule, for our direction, paramount to all others as to specific denomination.

Hemerocallis alba

PLATE CXCV.

HYPOXIS OBLIQUA.

Oblique-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſex-partita, perſiſtens, ſupera. Capſula baſi anguſtior. Spatha bivalvis.

BLOSSOM ſix-parted, remaining, above. Capſule narrower at the baſe. Sheath two-valved. See HYPOXIS STELLATA. Pl. CI. Vol. II.

SPECIFIC CHARACTER.

Hypoxis ſcapo ſubtrifloro, piloſo, longitudine foliorum; pedunculis flore triplo longioribus; foliis lineari-lanceolatis, oblique flexis, glabris; radice fibroſa.

Hypoxis with moſtly three flowers on the ſtem, which is hairy, the length of the leaves; foot-ſtalks three times the length of the flower; leaves linearly lance-ſhaped, obliquely bent downward, ſmooth; root fibrous.

REFERENCE TO THE PLATE.

1. A Petal of the Bloſſom, with its Chive, as attached to its baſe.
2. The Seed-bud, on its foot-ſtalk, with a part of the tube of the bloſſom, to which the Chives are fixed.
3. The Seed-bud, Shaft and Summit, magnified.

THIS ſpecies of Hypoxis is from the Cape of Good Hope; and, we believe, ſolely in the poſſeſſion of G. Hibbert, Eſq. Clapham; from whoſe collection our drawing was made, in June, this year, 1801. It appears to be a hardy green-houſe plant; but, is certainly more curious than handſome, and, from its general character, we ſhould judge the propagation would be from the root.

Profeſſor Jacquin has given the Hypoxis Obliqua in his Icones Plantarum Rariorum, 2. t. 371; and in his Supplement to the Collectanea, 54; but, we muſt ſuppoſe from a more vigorous ſpecimen than ours; as, the appearance of a woolly character, at the margin of the leaves, was not to be traced in our plant, although every other part is exact. Wherefore, we have retained his name, though we have rejected the latter part of his ſpecific character, to introduce one, which we conſider, of more conſequence, as oppoſed to thoſe with bulbous roots, this being fibrous.

Hypoxis obliqua

PLATE CXCVI.

IXIA MACULATA.

Spotted-flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis.
STAMINA tria, erectiuſculo-patula.

BLOSSOM 6 petals, ſpreading, equal.
CHIVES three, upright, ſpreading.
See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis enfiformibus, glabris, ſcapo duplo brevioribus; floribus alternis, ſub-ſpicatis; petalis baſi obſcuris, ovatis, concavis; ſtigmatibus bifidis.

Ixia with ſword-ſhaped, ſmooth leaves, half the length of the flower-ſtem; flowers alternate, rather ſpiked; petals dark at the baſe, egg-ſhaped and concave; ſummits two-cleft.

REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. A Flower cut and ſpread open, with the Chives in their natural ſtation.
3. The Pointal complete, with one of the Summits detached and magnified.

THIS Ixia has been long cultivated in Britain, ſo ſays Millar, &c. but, till within theſe few years, we have not ſeen it in our gardens; perhaps it has been (like many others) loſt to us, and recently introduced with the multitude of other ſpecies, which now decorate our green-houſes; either from the Cape of Good Hope or Holland. It is one of the moſt deſirable of the genus, from the length of time it continues in flower; which is, at leaſt a month, from the firſt flowers beginning to expand. It increaſes by the bulb, and is to be cultivated as other common Ixias. Flowers in May or June.

Pl. 170

Iria maculata

PLATE CXCVII.

NYMPHÆA CŒRULEA.

Blue Water-Lily.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium inferum, tetraphyllum, magnum, ſupra coloratum, perſiſtens.

COROLLA. Petala numeroſa (quindecem ſæpe,) germinis lateri inſidentia, ſerie plus quam ſimplici.

STAMINA. Filamenta numeroſa (ſeptuaginta ſæpe,) plana, curva, obtuſa, brevia. Antheræ oblongæ, filamentorum margini adnatæ.

PISTILLUM. Germen ovatum, magnum. Stylus nullus. Stigma orbiculatum, planum, peltato-ſeſſile, radiis notatum, margine crenatum, perſiſtens.

PERICARPIUM. Bacca dura, ovata, carnoſa, rudis, collo anguſtata apice coronata, multilocularis (decem ad quindecem loculis,) pulpa plena.

SEMINA plurima, ſubrotunda.

EMPALEMENT. Cup beneath, four leaved, large, coloured above, permanent.

BLOSSOM. Petals numerous (often fifteen,) placed on the ſide of the ſeed-bud, in more than one row.

CHIVES. Threads numerous (often ſeventy,) flat, curved, blunt, ſhort. Tips oblong, fixed to the margin of the threads.

POINTAL. Seed-bud egg-ſhaped, large. Shaft, none. Summit round, flat, central, fitting, marked in rays, ſcolloped at the edge, remaining.

SEED-VESSEL. Berry hard, egg-ſhaped, fleſhy, rough, narrowed at the neck, crowned at the top, many-celled (from ten to fifteen cells,) full of pulp.

SEEDS many, roundiſh.

SPECIFIC CHARACTER.

Nymphæa foliis cordato-orbiculatis, ſenioribus crenatis, lobis acutis imbricatis, acuminatis; petalis acutis, lanceolatis, cæruleis.

Nymphæa with between heart-ſhaped and round leaves, the old ones ſcolloped, lobes ſharp, tiled, and tapered; petals ſharp, lance-ſhaped, and blue.

REFERENCE TO THE PLATE.

1. A Chive.
2. The Seed-bud and Summit.
3. The Seed-bud, cut tranſverſely, to ſhew the number of cells.

AMONGST aquatic or water plants, the Nymphæas are undoubtedly the moſt deſirable in cultivation; although, we ſhould agree to the excluſion of N. Nelumbo, &c. now forming a diſtinct genus in the Sp. Plant. of Willdenow; taken from Uſteri's Ed. of Juſſieu's Gen. Plant. claſſed from the natural characters, under the title of Nelumbium's. This plant may be kept in the green-houſe, or hot-houſe, in a large tub filled with water and a ſmall portion of mud at the bottom. It propagates by the root, and the flowers, which are extremely fragrant, are produced in Auguſt, in which month, this year, our drawing was made, from a large plant in the Hibbertian collection; but, from an omiſſion in the figure, we were obliged to finiſh the plate from a plant, in the collection of J. Vere, Eſq. Kenſington Gore, ſtill in flower, the beginning of October. The leaves of this ſpecies are moſt beautifully ſcolloped, and near a foot in diameter; but the indentitions are ſcarcely to be perceived in the younger; one of which, as we could not introduce the larger, is ſhewn on the plate of the natural ſize.

It is a native of the Cape of Good Hope, and was introduced to the Royal Gardens, Kew, by Mr. F. Maſſon, about the year 1792.

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Nymphæa cærulea

PLATE CXCVIII.

BAUERA RUBIOIDES.

Three-leaved Bauera.

CLASS XIII. ORDER II.

POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium octophyllum, foliolis perſiſtentibus, acuminatis, reflexis, dentatis.
COROLLA. Petala octo, ovata, concava, patentia, æqualia, calyce majora.
STAMINA. Filamenta numeroſa, capillaria, corolla breviora, receptaculo inſerta. Antheræ latiuſculæ, obtuſæ, erectæ.
PISTILLA. Germen ſubovatum, villoſum. Styli duo, filiformes, longi, apice curvati. Stigmata ſimplicia.
PERICARPIUM. Capſula ſubrotunda, piloſa, apice dehiſcens, bilocularis, bivalvis.
SEMINA plurima, ſubrotunda.

EMPALEMENT. Cup eight-leaved, remaining, leaflets tapered, reflexed, and toothed.
BLOSSOM. Eight petals, egg-ſhaped, concave, ſpreading, equal, larger than the cup.
CHIVES. Threads numerous, hair-like, ſhorter than the bloſſom, fixed into the receptacle. Tips broadiſh, obtuſe and erect.
POINTALS. Seed-bud nearly egg-ſhaped, hairy. Shafts two, thread-ſhaped, long, curved at the ends. Summits ſimple.
SEED-VESSEL. Capſule roundiſh, hairy, ſplitting at the top, two cells, two valves.
SEEDS many, roundiſh.

SPECIFIC CHARACTER.

Bauera foliis ternatis, apice dentatis, ſeſſilibus, oppoſitis.

Bauera with leaves compoſed of three leaflets, toothed at the point, growing cloſe to the ſtem, and oppoſite.

REFERENCE TO THE PLATE.

1. The Empalement, with the Chives and Pointal.
2. The Chives and Pointal magnified.
3. The Empalement, Seed-bud, Shafts, and Summits, magnified.
4. The Seed-bud cut tranſverſely, with the ſeeds in the cells, magnified.

THIS handſome ſhrub, a native of Port Jackſon, New Holland, was firſt raiſed at the ſeat of the Hon. the Marchioneſs of Rockingham, Hillingdon, Middleſex, in the year 1793; and, from a plant, in the conſervatory, ſtill in flower, this preſent month November, our drawing was made, at the Nurſery, Hammerſmith. It is hardy, although delicate in ſtructure, and flouriſhes in the green-houſe. The ſtem of the plant from which our figure was taken, although the oldeſt in the kingdom, and near ſix feet high, is ſcarce the thickneſs of a quill at the baſe, therefore muſt be ſupported. The young ſhoots and leaves are covered with a ſlight pile; the ſmaller branches ſtand out at right angles, proceeding from the inſertion of the leaves, and the whole plant has, at firſt ſight, much the appearance of a Rubus. It is propagated by cuttings, made in the month of March, and put under a ſmall bell-glaſs on the heat of a hot-bed; the cuttings ſhould be from the extreme ends of the young ſhoots. Sir J. Banks, Bart. P. R. S. &c. from whoſe natural genius and love for the ſcience, and by whoſe foſtering and liberal hand to promote it, the ſtudy of Botany has become ſo general a taſte; has named this genus, in honour of two moſt eminent Botanical painters, of the name of Bauer, natives of Germany, and brothers. The one, now under the immediate patronage of Sir Joſeph, as Botanical Painter to his Majeſty at Kew; well known for his ſuperb and excellent coloured engravings of Heaths, &c. in large folio. The younger conſidered no leſs able, engaged under the ſame influence, with the other artiſts, &c. who are now upon the laſt expedition for diſcovery to the South Sea; but not equally known to Botaniſts, as the perſon who accompanied the late Dr. Sibthorpe, on his voyages through Greece; and whoſe pencil has produced all thoſe drawings, deſigned to decorate and illuſtrate the famous Flora Græca, preparing for the public, under the auſpices of the intelligent Dr. Smith, P. L. S. &c. &c.

Bauera rubioides

PLATE CXCIX.

CAMELLIA JAPONICA. *Var. flo. rubro pleno.*

Double red Camellia.

CLASS XVI. ORDER VI. *of Schreber's 8th edit. of Gen. Plant.*

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus; foliolis interioribus majoribus.

EMPALEMENT tiled, many-leaved; the inner leaflets the largeſt.

SPECIFIC CHARACTER OF VARIETY.

Camellia foliis ſenioribus baſi attenuatis, junioribus rubentibus; petalis interioribus divaricato-erectis; floribus plenis, rubris.

Camellia with the older leaves tapered at the baſe, the younger ones reddiſh; the inner petals ſtand upright ſpreading different ways; flowers double and red.

AGAIN have we to call upon the indulgence of our Botanical friends for their ſufferance, in a third intruſion on the forms of our own preſcription. But, as we had given the two other varieties of this fine plant; and taking it for granted, by judging from our own feelings, that a figure of this very ſcarce variety would be agreeable to moſt; that they might be (by compariſon) able to decide upon the difference which does exiſt, but has been denied by many, between this, and the Striped Var.; ſee our figure, Vol. II. Pl. XCI. It has been thought by moſt, who have not ſeen this plant; that it was but the Striped Var. which had loſt its variegation. This is certainly not the caſe; for, it ſtands as diſtinct from the Striped, as from the White variety; which may be readily traced, either from the plants themſelves, or our figures; by comparing the ſpecific, or rather differing character we have aſſigned to each. The Double red Camellia was introduced about the year 1794 from China, by R. Preſton, Eſq. Woodford, Eſſex.

The largeſt plant now in Europe, of this variety, is in the ſelect and moſt valuable collection of the Hon. T. Greville, Eſq. Paddington, imported, laſt year, from China in the higheſt perfection. It is propagated by cuttings, or layers; and delights in a light, ſandy loam; with about one-third of the pot, from the bottom, filled with peat earth. It flowers from November, till February, in the Hot-houſe; or from January, till April, if kept in the Green-houſe. Our figure was taken, in November, this year, at the Hammerſmith Nurſery.

Camellia Japonica
Var flore rubro plena

PLATE CC.

MELALEUCA HYPERICIFOLIA.

St. John's-wort-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many Sets. Many Chives.

ESSENTIAL GENERIC CHARACTER.

Calyx quinquefidus, ſemiſuperus. Petala quinque. Filamenta multa, longiſſima, connata in quinque corpora. Piſtillum unum. Capſula trilocularis.	Cup five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal one. Capſule three-celled.

See Melaleuca ericæfolia, Pl. CLXXV. Vol. III.

SPECIFIC CHARACTER.

Melaleuca foliis oppoſitis, eliptico-oblongis, uninerviis; floribus confertis; filamentis longiſſimis, linearibus, apice radiato-multifidis.	Melaleuca with oppoſite leaves, eliptic-oblong, one-nerved; flowers cluſtered; threads very long, linear, rayed and many-cleft at the top.

REFERENCE TO THE PLATE.

1. A flower, natural ſize.
2. One of the five bundles of Chives, with its petal, to which it is attached at the baſe, magnified
3. The cup, ſeed-bud, ſhaft and ſummit, natural ſize, the ſummit detached and magnified.

About the year 1792 this plant was firſt raiſed from ſeeds, by the late Mr. William Malcolm, Nurſeryman, at Stockwell, Surry; and was, from the very great reſemblance it bears to the St. John's-worts, ſo denominated, until it flowered. It has now become one of the commoneſt, of what are generally termed, Botany Bay plants; yet unqueſtionably ranks with the handſomeſt whether for its foliage, form of growth, or flowers, which are of a moſt beautiful red-purple, ſcarcely to be imitated in painting. The ſingular manner in which the flower-ſtem is thrown out, as it were, from the old wood, in a horizontal direction, is common to many other ſpecies of the Genus. It grows to the height of four or five feet, very erect in every part; is eaſily increaſed by cuttings, and thrives beſt in peat earth. Although it is ſaid to grow in ſwampy grounds in New South Wales, ſee Linnæan Tranſactions, Vol. III. p. 279, nevertheleſs, with us, a dry, or damp ſituation in the green-houſe, appears equally congenial to it. In the month of September 1799, our drawing was taken at the Conſervatory of R. James, Eſq. Groſvenor Place.

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Melaleuca hypericifolia.

PLATE CCI.

AIZOON CANARIENSE.

Purſlane-leaved Aizoon.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum; laciniis lanceolatis, perſiſtentibus.
COROLLA nulla.
STAMINA. Filamenta plurima, capillaria, ſinui calycis per phalanges in ſerta. Antheræ ſimplices.
PISTILLA. Germen pentagonum, ſuperum. Stili quinque, ſimplices. Stigmata ſimplicia.
PERICARPIUM. Capſula ventricoſa, retuſa, pentagona, quinquelocularis, quinque valvis.
SEMINA plura, ſubrotunda.

EMPALEMENT. Cup one leaf, five-parted; ſegments lance-ſhaped, remaining.
BLOSSOM none.
CHIVES. Threads numerous, hair-like, inſerted into the hollow part of the cup in bunches. Tips ſimple.
POINTALS. Seed-bud five-ſided, above. Shafts five, ſimple. Summits ſimple.
SEED-VESSEL. Capſule bellied, dented, five-ſided, five-celled, five-valved.
SEEDS many, roundiſh.

SPECIFIC CHARACTER.

Aizoon foliis cuneiformi-ovatis; floribus ſolitariis, ſubſeſſilibus, axillaribus.

Aizoon with leaves between wedge and egg-ſhaped; flowers ſolitary, growing almoſt cloſe to the ſtem from the inſertion of the leaves.

REFERENCE TO THE PLATE.

1. The Empalement ſhewn from the inſide.
2. The ſame ſhewn from the outſide.
3. A Chive magnified.
4. The Pointals natural ſize.
5. The ſame, magnified.

THIS plant is herbaceous, and is found near the ſea coaſt, in moſt parts of the world, within the tropics. It has a character common to many Genera of the natural order of ſucculents, ſuch as Meſembryanthemum, Craſſula, &c. that of an indeterminate number of pointals; which, in this genus, extend from three, to five, on different plants; this circumſtance not having been ſufficiently attended to has unfortunately occaſioned ſome confuſion. Brown in his Natural Hiſtory of Jamaica has deſcribed it as growing on that Iſland, and with five pointals, therefore placed it to its right genus. Plumier, Sloane, &c. treated it as Portulaca, to which, as the genus now ſtands, it in no way affines. Læfling in his Iter Hiſpanicum, publiſhed in 1758, having found the plant in Spain with three pointals, immediately placed it to another genus, Halimum; upon whoſe authority, corroborated by Jacquin, (who acknowledges a variation in the number of pointals, on different plants, found in the different Caribee Iſlands,) Linnæus took up the plant, ſaid to have but three pointals, under the title Seſuvium. As to the plant ſaid to be cultivated by Miller in the Hort. Kew: under the laſt named genus, we have no difficulty in referring that, to the Aizoon canarienſe of the ſame work; as the time of flowering not being noticed, the diſtinction of character could not be obſerved, and the genus introduced, taken upon the *gratis dictum* of Miller. Burmann, in his Ed: of Rumphius's plants of Amboyna, has it as Halimus; and Plukenet as Portulaca from Eaſt Indian ſpecimens; with numbers of other Botaniſts from different parts; as Ægypt, the Canary Iſlands, &c. &c. under different names.

Seeds received from Spain of our plant were ſown by Mr. Anderſon in 1798, at the gardens of J. Vere, Eſq. Kenſington Gore; ſince which time, it has annually died to the ground, about November, and re-appeared in Spring; from this circumſtance, the great delicacy of the plant, and having been treated as an annual, it has been repeatedly loſt to this country; though ſo conſtantly introduced, in almoſt every parcel of ſeeds which arrives from either the Eaſt or Weſt Indies. It may be increaſed by cuttings made early in the year, and put in a hot-bed to accelerate their growth, and ſhould be planted in rich loamy earth. It flowers from July till September. To preſerve it more than one year, it muſt be kept in the hot-houſe.

Pl. 201

Aizoon canariense

PLATE CCII.

SAMYDA SERRULATA.

Sawed-leaved Samyda.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, interne coloratum; tubus campanulatus, decemſtriatus; limbus quinquefidus, laciniis ovatis planis, patentiſſimis, obtuſis, duabus acumine auctis.

COROLLA nulla.

Nectarium monophyllum, conicum, truncatum, decemſtriatum, longitudine fere calycis, ejuſque limbo ad baſin inſertum, ore obtuſe 10 ad 18-dentato.

STAMINA. Filamenta nulla. Antheræ decem ad octo-decem, oblongæ, erectæ, parvæ, dentibus nectarii inſidentes.

PISTILLUM. Germen ovatum. Stylus ſubulatus, erectus, longitudine nectarii. Stigma capitatum, obtuſum.

PERICARPIUM. Capſula ſubrotunda, quadriſulcata, coriacea, craſſa, unilocularis, quadrivalvis.

SEMINA plurima, ſubovata, obtuſa, baſi foraminulo notata, valvulis affixa, obvoluta pellicula pulpoſa.

EMPALEMENT. Cup one leaf, coloured within; tube bell-ſhaped, ten-ſtriped; border five-cleft, ſegments egg-ſhaped, ſmooth, very much ſpread, obtuſe, two lengthened by a pointed end.

BLOSSOM none.

Honey-cup, one leaf, conical, appearing cut off, ten-ſtriped, nearly the length of the cup and fixed to it at the baſe of the border, obtuſely from 10 to 18-toothed at the mouth.

CHIVES. Threads none. Tips from 10 to 18, oblong, upright, ſmall, fixed to the teeth of honeycup.

POINTAL. Seed-bud egg-ſhaped. Shaft awl-ſhaped, upright, the length of the honey-cup. Summit headed, blunt.

SEED-VESSEL. Capſule roundiſh, four-furrowed, leathery, thick, one-celled, four valves.

SEEDS many, nearly egg-ſhaped, blunt, marked with a ſmall hole at the baſe, fixed to the valves, ſurrounded with a ſlight pulpy ſkin.

SPECIFIC CHARACTER.

Samyda floribus roſeis, dodecandris; foliis ovato-oblongis, ſerrulatis.

Samyda with roſy coloured flowers having twelve chives; leaves between egg-ſhaped and oblong, ſlightly ſawed.

REFERENCE TO THE PLATE.

1. The Empalement, with its honey-cup, and the tips, cut and ſpread open.
2. The Pointal and ſeed-bud natural ſize, the ſummit detached and magnified.
3. The Seed-bud cut tranſverſely and magnified, to ſhew the number of valves and ſituation of the ſeeds.

THE Sawed-leaved Samyda is an inhabitant of moſt of the Weſt India Iſlands, but was received in England, about the year 1795, from the Iſland of St. Vincent; tranſmitted from thence, by Mr. Anderſon, curator of the Botanic garden, originally eſtabliſhed there, under the ſanction of our government, by Dr. Young. It is a very tender plant, grows to about three feet in height, making but few ſmall branches, and rather weak in the ſtem. Our drawing was taken in July this year at the garden of T. Evans, Eſq. Stepney, who we believe firſt had it to flower in this kingdom. It is propagated by cuttings; muſt be kept in the bark-bed of the hot-houſe, and ſhould be planted in very rich mould.

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Samyda serrulata

PLATE CCIII.

IXIA COLUMNARIS.

Columnar-chived Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis.	Blossom 6 petals, ſpreading, equal.
Stigmata tria, erectiuſculo-patula.	Summits three, upright-ſpreading.

SPECIFIC CHARACTER.

Ixia filamentis baſi cohærentibus; floribus capitatis; corollis purpureis.	Ixia with threads united at the baſe; flowers grow in heads; bloſſoms purple.

REFERENCE TO THE PLATE.

1. The two Valves of the empalement.
2. A Bloſſom cut open.
3. The Chives and Pointal, with the tube of the bloſſom, the border cut off.
4. The Chives cut and ſpread open, with the tube of the bloſſom, magnified.
5. The Pointal and Seed-bud, with one of the Summits detached and magnified.

Here we have a plant which preſents one of thoſe obſtacles, conſtantly met, in all attempts to a ſyſtematic arrangement of the productions of nature. Every feature of Ixia we find poſitively expreſſed, but in the unison of the Threads; a circumſtance, which Linnæus in his ſyſtem, always deemed of ſuch ſingular moment, that a number of Genera have been formed, from this natural order of plants, hinging on this only character.

But, as this plant has been named, and accurately deſcribed by Mr. Salisbury, in the Prodromus to his garden 36. n. 18; and continued, from him, by Profeſſor Martyn, in his Edit. of Miller's Dict. article Ixia, 50; in the following therefore ſuch ſuperiour judgments to our own, we have thought it proper, not to make any alteration; and in conſequence, have retained his Generic and Specific title. The extreme brilliance of the flowers of Ixia Columnaris, pervading all the varieties, (of which we have drawings of 6,) is not exceeded by any in the whole Genus; they generally, are not longer expanded than for about four hours, and that only under a hot ſun; from about eight, till twelve o'clock; when they cloſe for the day; but nevertheleſs they have a permanence not uſual in Ixias, as the ſame bloſſoms will open diurnally for above a week. It is a native of the Cape of Good Hope, and came firſt to England, by the way of Holland, about the year 1794. It flowers in June and July, amongſt the lateſt of the tribe, and increaſes by the root in abundance. Our figure was taken at the Hammerſmith Nurſery.

Aa columnaris

PLATE CCIV.

GERANIUM LACINIATUM. *Var. flore purpureo.*

Ragged-leaved Geranium. *Purple flowered Variety.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque.
FRUCTUS roſtratus, penta-coccus.

One POINTAL. Five ſummits.
FRUIT furniſhed with long awns; five dry berries.

SPECIFIC CHARACTER.

GERANIUM foliis radicalibus, integris laciniatiſque, petiolis filiformibus; calycibus monophillis; ſtaminibus quinque fertilibus; radice tuberoſa; floribus purpureis.

GERANIUM with leaves growing from the root, entire and jagged, footſtalks thread-ſhaped; cups one-leaved; five fertile chives; root tuberous; flowers purple.

REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. The Chives ſpread open.
3. The Pointal and ſeed-bud magnified.

THIS very handſome variety, (for we cannot conſider it as a ſpecies,) of the Geranium laciniatum, was imported in 1800, from the Cape of Good Hope, by G. Hibbert Eſq.; in whoſe collection it flowered, laſt year, in the month of June, when our drawing was taken; and we believe it is in no other at preſent in this kingdom. Mr. Allen, under whoſe care that collection is preſerved in ſuch high order and perfection, and to whoſe kind communications, we are much indebted; informs us, that he has not, as yet, been able to increaſe it; but, from every appearance, the plant, he has no doubt, may, by the root, as are the other ſpecies which have the tuberous character; and that he did not treat it differently from the reſt of the Geraniums which compoſe this branch of that intereſting family.

Geranium laciniatum

PLATE CCV.

PLATYLOBIUM LANCEOLATUM.

Lance-ſhaped-leaved Flat-pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, quinquefidus; laciniis duabus ſupremis maximis, obtuſis. Stamina omnia coalita. Legumen pedicellatum, compreſſum, dorſo alatum; polyſpermum.

CUP bell-ſhaped, five-cleft; the two upper ſegments very large and obtuſe. Chives all united Pod on a footſtalk, compreſſed, winged along the back; many ſeeded.

See Plate CXCI. Vol. III. PLATYLOBIUM SCOLOPENDRUM.

SPECIFIC CHARACTER.

Platylobium foliis glaberrimis, diſtichis, linearilanceolatis; floribus ſolitariis, axillaribus; ramis junioribus ſub-compreſſis.

Flat-Pea with very ſmooth leaves pointing oppoſite ways, linear-lance-ſhaped; flowers grow ſolitary from the lower part of the leaves cloſe to the branches; the younger branches are rather flatiſh.

REFERENCE TO THE PLATE.

1. The Empalement of the flower.
2. The Standard, or upper petal of the bloſſom.
3. One of the Wings, or ſide petals of the bloſſom.
4. The two lower Petals, or keel of the bloſſom.
5. The Chives, natural ſize.
6. The ſame, magnified.
7. The Seed-bud, natural ſize.
8. The ſame magnified, but rather more mature.

No Claſs, amongſt the 24, is more diſtinct in its natural character than Diadelphia; yet, ſince the diſcovery of New South Wales, no one has preſented more difficulty to the botanist. From the great number of plants of that country, appertaining to this Claſs, and the ſtrong differing characters which moſt of them exhibit, ſuch indeed, as might formerly have been thought of ſufficient moment to conſtitute new Genera; many muſt now bend a little for the eaſe of ſcience; or otherwiſe they will in a ſhort time become doubled in number; a matter of no ſmall moment to weak although willing memories. Our having placed the P. ſcolopendrum of this Volume, Pl. CXCI., and our preſent plant to the Genus Platylobium, is the occaſion of the above prelude; as it may be thought by ſome who have not ſeen the ſeed veſſel and ſeeds, the principal parts upon which the Genus is founded, that nature is a little outraged in ſo doing; but, without we had ſo joined them, we muſt have given them a new title. This plant was introduced at the ſame time as the P. ſcolopendrum, and the three other ſpecies now in Britain; not one of them, but has baffled all our moſt experienced cultivators to increaſe it, by any other mode than from the ſeed; ſome of which has been procured from the P. formoſum, only. They all require to be kept in the dryeſt part of the green-houſe, as they are impatient of damp. Our drawing was made in November 1801, at the Nurſery of Meſſrs. Lee and Kennedy, Hammerſmith, by whom it was firſt raiſed in 1792. The general height of the Platylobiums, is about three feet and a half, at moſt, in this country, and they do not form buſhy ſhrubs. They require a light, ſandy peat ſoil, with rather leſs root room, than is in general neceſſary for plants of equal ſize.

Platylobium lanceolatum.

PLATE CCVI.

DRACÆNA BOREALIS.

Oval leaved Dracæna.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointals.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala ſex, oblonga, erectiuſcula, æqualia, unguibus cohærentia.

STAMINA. Filamenta ſex, unguibus inſerta, ſubulata, medio craſſiora, baſi membranacea, longitudine vix corollæ. Antheræ oblongæ, incumbentes.

PISTILLUM. Germen ovatum, ſexſtriatum. Stylus filiformis, longitudine ſtaminium. Stigma trifidum, obtuſum.

PERICARPIUM. Bacca ovata, ſexſulcata, trilocularis.

SEMINA ſolitaria, ovato-oblonga, apice incurvata.

OBS. Character fere Aſparagi, habitus diverſus.

EMPALEMENT none.

BLOSSOM. Petals ſix, oblong, rather upright, equal, cohering by the claws.

CHIVES. Threads ſix, inſerted into the claws, awl-ſhaped, thicker about the middle, ſkinny at the baſe, almoſt the length of the bloſſom. Tips oblong, incumbent.

POINTAL. Seed-bud egg-ſhaped, ſix-ſtreaked. Shaft thread-ſhaped, the length of the chives. Summit three-cleft, obtuſe.

SEED-VESSEL. Berry egg-ſhaped, ſix-furrowed, three-celled.

SEEDS ſolitary, oblong-egg-ſhaped, turned inward at the end.

OBS. The Character is very near Aſparagus, the habit different.

SPECIFIC CHARACTER.

Dracæna, herbacea, ſubcauleſcens, foliis ellipticis.

Dracæna, herbaceous, rather aſpiring to a ſtem, leaves eliptic.

REFERENCE TO THE PLATE.

1. A Petal with its chive.
2. A Chive, magnified.
3. The Pointal, magnified.
4. A ripe Berry.
5. The ſame, cut tranſverſely.

ABOUT the year 1776, this plant was firſt received in England, by Meſſrs Lee and Kennedy from Montreal, Canada, N. America. It is a native of all the northern parts of that country, as far as New England; propagates itſelf by the root, and flowers in July. It will not thrive but on a ſhady border, which ſhould be made of light ſandy peat.

Much we revere the name of Solander, and highly rate his merit as a Botaniſt; yet we cannot forbear ſtating our diſſent from the arrangement of this plant, as a Dracæna, certainly nothing can be more diſſimilar, in every part; this may be eaſily traced by comparing our figure and diſſections, as connected with the Generic character. The whole natural habit of the plant, points out Convallaria for its genus, to which it is much nearer allied than Dracæna, even in the ſexual characters. However, we only ſtate our opinions, without even thinking of change, as the plant is known as Dracæna, having been figured and deſcribed in the Firſt Vol. of the Kew Catalogue, page 454, under the preſent title.

Dracæna borealis

PLATE CCVII.

MIMOSA LONGIFOLIA.

Long-leaved Mimoſa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various diſpoſitions. Upon one Plant.

ESSENTIAL GENERIC CHARACTER.

Hermaphrod. CALYX 5-dentatus. Cor. 5-fida. Stam. 5 ſeu plura. Pist. 1. Legumen.
Maſcul. CALYX 5-dentatus. Cor. 5-fida. Stam. 5, 10, plura.

Hermaph. CUP five-toothed. Bloſs. 5-cleft. Chives 5 or more. Pointal one. A pod.
Male. CUP 5-toothed. Bloſs. 5-cleft. Chives 5, 10, or more.

See MIMOSA STRICTA. Pl. LIII. VOL. I.

SPECIFIC CHARACTER.

Mimoſa foliis integris longiſſimis, utrinque glabris, obtuſis; capituli geminati, racemoſi, longiſſimi, oppoſiti, lutei, ſubcernui.

Mimoſa with entire, very long leaves, ſmooth on both ſides and blunt; flower heads grow by pairs in very long bunches oppoſite to each other, yellow and rather nodding.

REFERENCE TO THE PLATE.

1. A flower, magnified, ſhewn ſideways.
2. The Empalement, magnified.
3. The Bloſſom, magnified.
4. A Chive, magnified.
5. The Pointal, magnified.

ABOUT the year 1792 J. Ord, Eſq. of Purſers Croſs, Fulham, received the ſeeds of this Mimoſa from New South Wales; the plants were raiſed, the enſuing year, by Mr. White, who has managed, much to his credit, the ſelect collection of that Gentleman near 20 years, and who obligingly ſent us a fine ſpecimen in March 1801, taken from a plant near 18 feet in height. Of the Mimoſas now in Britain, we think, this ſpecies is likely to exceed them all in height; making a very handſome plant; and moſt beautiful at the ſeaſon when covered with its long pendulous bunches of flowers. It is increaſed by cuttings, but with difficulty; and, as yet, ſeeds have not been perfected in this country. A light ſandy earth is what it thrives in moſt, but it will grow in almoſt any ſoil.

Mimosa longifolia

PLATE CCVIII.

LASIOPETALUM FERRUGINEUM.

Ruſty Woolly-bloſſom.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium triphyllum, foliolis ſubulatis, tomentoſis, perſiſtentibus, ferruginoſis.

COROLLA monopetala, rotata, lanuginoſa, quinquefida; laciniis ovatis, apicibus acutis, incurvatis.

STAMINA. Filamenta quinque, brevia, erecta, germinis baſi affixa. Antheræ erectæ, dorſo bilobæ, apice poris duobus.

PISTILLUM. Germen ovatum, ſuperum. Stylus minutus, filiformis, erectus. Stigma obſoletum.

PERICARPIUM. Capſula ſubrotunda, ſupera, triſulcata, trilocularis, trivalvis, diſſepimentis e medio valvularum.

SEMINA numeroſa, ſubrotunda.

EMPALEMENT. Cup three-leaved, leaflets awl-ſhaped, downy, permanent, and of a ruſty iron colour.

BLOSSOM, one petal, wheel-ſhaped, woolly, and five-cleft; ſegments egg-ſhaped, ſharp pointed and incurved at the point.

CHIVES. Threads five, ſhort, upright, fixed to the baſe of the ſeed-bud. Tips upright, two-lobed at the back, and two pores at the point.

POINTAL. Seed-bud egg-ſhaped, above. Shaft ſmall, thread-ſhaped, upright. Summit obſolete.

SEED-VESSEL. Capſule roundiſh, above, three-furrowed, three cells, three valves, partitions from the middle of the valves.

SEEDS numerous, roundiſh.

SPECIFIC CHARACTER.

Laſiopetalum foliis ſublinearibus, obtuſis, inequaliter ſinuatis, ſupra glabris, ſubtus lanuginoſis; floribus racemoſis, axillaribus.

Woolly bloſſom with nearly linear leaves, blunt, unequally indented, ſmooth above, woolly beneath; flowers grow in long bunches from the inſertion of the leaves into the ſtem.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Bloſſom.
3. The Chives and Pointal.
4. A Chive, magnified.
5. The Pointal.
6. The ſame magnified.

THE ſingularity of this plant recommends it to our notice, rather than its beauty. It is a native of New South Wales, near Port Jackſon, and is found in marſhy grounds; where its branches are ſeen to extend many yards, embracing all the under ſhrubs they meet; they ſeldom exceed the ſize of ſmall twine, but are exceeding tough. The whole plant, when old, has a dirty or ruſty brown appearance, the leaves becoming very ſmall and narrow; although from culture in this country, we have ſeen the leaves, on ſome plants, near an inch in breadth, and three in length. For the Generic and Specific titles of this plant we are indebted to Dr. Smith, P. L. S. &c. and we do not think more appropriate ones could have been invented. The giving ſpecific names and characters to plants, where only one has been diſcovered of the Genus, although a little from Linnæan principles, we muſt confeſs accords with our ideas; for, although, to compare is neceſſary to diſtinctive difference; yet, if the moſt oſtenſible, and novel appearance of the parts, are taken from the firſt diſcovered plant, for the ſpecific character; there is no more danger of confuſion, from any addition to the Genus, than if no ſuch obſervations had been made; for, what muſt in future be taken as ſpecific diſtinction muſt ariſe from an oppoſition to the firſt plant on which the Genus was founded: wherefore we have adopted this manner, from the commencement of the work. This plant was firſt raiſed at the Hammerſmith Nurſery, from ſeeds received from New South Wales in 1791. It is propagated by cuttings taken from the young ſhoots, in April; ſhould be planted in very ſandy peat earth, and kept very dry in winter. It is in flower nearly the whole year.

Lasiopetalum ferrugineum

PLATE CCIX.

GERANIUM MELANANTHUM.

Black-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roſtratus, penta-coccus.	One Pointal. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis lobatis integriſque, hiſpidis, obtuſis; calycibus monophyllis, laciniis linearibus; floribus nigricantibus, dioicis; radice tuberoſa.	Geranium with lobed, and entire leaves, hairy and obtuſe; cups one leaved, ſegments linear; flowers blackiſh, with the chives and pointals diſtinct; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement, natural ſize, the tube cut open.
2. The Chives of a male bloſſom, natural ſize.
3. The ſame, cut open and magnified.
4. The abortive Pointal of a male bloſſom, natural ſize.
5. The ſame, magnified.
6. The abortive Chives of a female bloſſom, natural ſize.
7. The ſame, magnified.
8. The Pointal of a female bloſſom, magnified.

This ſpecies of Geranium has been given by Profeſſor Jacquin in his Icon: rar. 514, and his Collectanea 4. 188; from him, we find it collated by Profeſſor Martyn into his Edit. of Miller's Dict. under the article Pelargonium, 59. But, as no notice has been taken by Jacquin of ſo remarkable a circumſtance as this ſpecies being Dioecious, or with male and female flowers on different plants; we may be led to ſuppoſe, that it has not flowered in Germany; or that the ſpecimens he had ſeen, were from male plants, as he numbers the fertile chives as five, which could not have been diſcovered from a female ſpecimen. Of five plants we had the good fortune to examine, which were all in flower at the ſame time, the roots of which had been imported from the Cape of Good Hope in the year 1793; three were male, with five fertile tips, the pointals obſolete; and two female, without the leaſt trace of a tip, in either bloſſom, or bud. As the tips frequently fall upon the expanſion of the flower, in many ſpecies, the bud is the only ſure ſitus whence to determine this character. It is increaſed from ſeed, procured from female plants only, which are much more unfrequent than the male; likewiſe from the roots, which, (like to thoſe of moſt of the ſpecies forming this link of the Genus,) are tuberous; forming ſmall bulbs of unequal ſizes, connected to the main root by ſlight radicles, and at a little diſtance from it: which, indeed, is the reaſon we have not adopted the term rapaceous, or turnip rooted, although it is a character which has been applied to them by very able Botaniſts, yet we think unadviſedly, or from their not having had the opportunity of examining them cloſely; as, we preſume, this term cannot with propriety be given to any root which is compoſed of more than one body, as are the Turnip, Carrot, Parſnip, Radiſh, &c. where it applies. It muſt be planted in light peat earth, and kept in the dryeſt part of the green-houſe, where it will flower about the month of July. Our figure was taken at Clapham in June, this year, from a male plant in the Hibbertian Collection.

Geranium melánanthum.

PLATE CCX.

ANTHOLYZA ÆTHIOPICA.

Broad-leaved Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla tubuloſa, irregularis, recurvata. Capſula infera.	Blossom tubular, irregular, and bent backward. Capſule beneath. See Antholyza ringens, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza foliis floribuſque diſtichis; lacinia ſumma corolla recta, ſpathulata, baſi ſerrata; ſpathis rigidis, adpreſſis.	Antholyza with the leaves as well as the flowers pointing oppoſite ways; the upper ſegment of the bloſſom ſtraight, ſpathula-ſhaped, and ſawed at the baſe; ſheaths harſh and preſſed to the bloſſoms.

REFERENCE TO THE PLATE.

1. The whole plant, upon a diminiſhed ſcale.
2. The Empalement.
3. A Bloſſom cut open, with the chives remaining.
4. The Seed-bud, Shaft, and Summits.

This very handſome Antholyza, which is ſeen ſo ſeldom to flower, in this kingdom, has been long an inhabitant of our gardens. So long ago as 1759, it is ſaid to have been cultivated by Miller; and from the firm and hardy character of the root, we ſhould queſtion its having been ſince that period, ever, like many others of this natural order, loſt to us. The unfrequency of its flowering has, perhaps, occaſioned the inattention, which is in general ſhewn to its cultivation; though moſt collectors poſſeſs the bulbs, few have ſeen their flowers. Our figure was taken in the month of July, this year, from a plant in the collection of T. Evans, Eſq. Stepney. It is increaſed from the roots, which ſhould be removed from the pots in July, and replanted the end of October. We have not been able to procure any certain data on which to give directions to inſure its flowering; but the plant in queſtion. was planted in a very large pot, the earth was a compound of light peat one part, ſtiff loam one part, and old rotten dung one part. It has been thought by ſome, that the Antholyza we have figured in the Botaniſt's Repoſitory, Plate XXXI. was the A. Æthiopica of Linnæus, &c; but, we have given it as a broad-leaved variety of the A ringens of that author, as we have a drawing of the Narrow-leaved Var: taken from a living plant, to which, as well as to our preſent figure, it much affines; and, we are led to think, natural order would not be much violated, if we had treated them all as varieties of one ſpecies.

Antholyza Æthiopica

PLATE CCXI.

IXIA COLUMNARIS. *Var. versicolor.*

Columnar-leaved Ixia. *Changeable-coloured var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, equalis. Stigmata tria, erectiuſculo-patula.	Blossom 6-petals, ſpreading, equal. Summits three, upright-ſpreading.

SPECIFIC CHARACTER.

Ixia filamentis baſi cohærentibus; floribus ſub-capitatis; corollis verſicoloribus.	Ixia with threads united at the baſe; flowers grow nearly in heads; bloſſoms change-able-coloured.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom ſpread open.
3. The Seed bud, with the Chives, as they ſtand upon the mouth of the bloſſom; the petals being cut off, and the ſummits as they appear through the tips, the whole magnified.
4. The Threads cut open, magnified.
5. The Seed-bud, Shaft, and Summits, magnified.

This moſt beautiful variety, of the Columnar-chived Ixia, was introduced to us, from Holland, in the year 1799. It flowers about the beginning of June, and continues in bloſſom about three weeks. The beautiful manner in which the colours of the flowers, of this variety, are blended, and which appear to change, as regarded from different points of view, is beyond the painter's ſkill; the beſt that can be done is but a faint imitation. The roots of this plant are rather more delicate than the other varieties of this ſpecies.

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Ixia columnaris

PLATE CCXII.

POGONIA DEBILIS.

Slender-ſtemed Pogonia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum perſiſtens; foliolis lanceolatis, erectis, acutis, apicibus reflexis.

COROLLA monopetala. infundibuliformis, tubus cylindricus, longitudine calycis, ore villis clauſo; limbus ſemiquinquefidus, laciniis concavis, acutis.

STAMINA. Filamenta quinque, tubo ſupra medium inſerta. Antheræ erectæ, ſagittatæ, intra faucem.

PISTILLUM. Germen ovatum. Stylus filiformis, apice parum curvatus, longitudine tubi, perſiſtens. Stigma concavum.

PERICARPIUM. Bacca ovata, compreſſa, calyci accreta.

SEMEN. Nux quadrilocularis, putamine duriſſimo; nuclei oblongi.

EMPALEMENT. Cup five-leaved, permanent; leaflets lance-ſhaped, upright, pointed, and reflexed at the ends.

BLOSSOM one petal, funnel-ſhaped, tube cylindrical, the length of the cup, the mouth cloſed with ſoft hairs; border half five-cleft; ſegments concave and pointed.

CHIVES. Threads five, inſerted into the tube above the middle. Tips upright, arrow-ſhaped, within the mouth.

POINTAL. Seed-bud egg-ſhaped. Shaft thread-ſhaped, a little curved at the end, the length of the tube, remaining. Summit concave.

SEED-VESSEL. An egg-ſhaped, flattened berry, growing to the cup.

SEED. A four-celled nut, ſhell very hard; kernels oblong.

SPECIFIC CHARACTER.

Pogonia foliis lanceolatis, apicibus ſæpe ſerrulatis, diſtichis; floribus ſolitariis, axillaribus, cæruleis; cortice ſcabroſa.

Pogonia with lance-ſhaped leaves, often ſlightly ſawed at the ends, and pointing oppoſite ways; flowers ſolitary, growing from the inſertion of the leaves into the ſtem, and blue; bark rough.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives as they ſtand in the bloſſom.
3. A Chive, magnified.
4. The Pointal.
5. Summit, with part of the Shaft, magnified.
6. The Cup, with the ripe Berry, the ſhaft remaining, and the cup a little enlarged.
7. A Berry cut tranſverſly, to ſhew the ſituation of the kernels in the cells.

THE Pogonia here figured, is the only one of the genus we at preſent poſſeſs; it is a native of Port Jackſon, New South Wales, and was firſt tranſmitted to England, by Col. Paterſon, in the year 1793. It is a climbing plant, the branches acquiring a conſiderable length, the bark being covered with ſmall tubercles, like glands, and the younger branches covered, their whole length, with bloſſoms. Although this is not to be reckoned amongſt the handſomeſt of the productions of that country, yet, from the lively colour of the flowers, the profuſion of them which the plant produces, and their continued ſucceſſion, from April, till September, it muſt be conſidered as a valuable addition to the ſmall number of ſcandent plants, as yet in our green-houſes; more particularly at the preſent juncture, when, from faſhion, a trellis has become a neceſſary appendage to them. It is propagated from the ſeeds, which ripen in this country; as well as from cuttings, which ſhould be made in May, and kept in the heat of a cucumber-frame, or hot-houſe, till they are rooted. It is grown beſt in ſandy peat. Our figure was taken at the Hammerſmith Nurſery, where it was firſt raiſed in this kingdom. The name, Pogonia, is derived from the appearance of the mouth of the flower which is bearded; Πωγωνιον, *Pogonion*, ſignifying a little beard.

Paonia debilis

PLATE CCXIII.

IXIA COLUMNARIS. *Var. latifolia.*

Columnar-chived Ixia. *Broad-leaved var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, equalis. Stigmata tria, erectiuſculo-patula.	Blossom 6-petals, ſpreading, equal. Summits three, upright-ſpreading.

SPECIFIC CHARACTER.

Ixia filamentis baſi cohærentibus; floribus ſubcapitatis; corollis pallide cæruleis; foliis latioribus, falcatis.	Ixia with threads cohering at the baſe; flowers grow nearly in heads; bloſſoms pale-blue; leaves broader, ſcymitar ſhaped.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, with the chives remaining attached.
3. The Tube of a bloſſom, with the chives, the petals cut off.
4. The ſame, cut open and magnified.
5. The Seed-bud, Shaft, and Summits; the ſummits detached and magnified.

The variety here given, was introduced to England, with the changeable-flowered variety, in 1799, from Holland. It is the ſtrongeſt marked variety of the ſix we poſſeſs; it flowers in May. The petals of this variety are remarkably thick at the inſertion into the tube, and have a ſoft, beautiful brown on the outſide, when the flower is cloſed, which ſtill is never ſo fully ſo, but a ſmall margin of the blue appears; which gives them a moſt beautiful appearance in that ſtate. No particular regime is neceſſary to this plant, more than what is neceſſary to all the common ſpecies.

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Iria columnaris

PLATE CCXIV.

WESTERINGIA ROSMARINACEA.

Roſemary-like Weſteringia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

Calyx. Perianthium monophyllum, ſub-cylindricum, erectum, perſiſtens, quinquedentatum, æquale; bracteis binis ſuffultum.

Corolla monopetala; petalum tubulatum calyce paulo longius; limbus patens, quinquepartitus, ſub æqualis; laciniis duabus ſuperioribus emarginatis.

Stamina. Filamenta quatuor, filiformia, fauci tubi inſerta, quorum duo ſuperiora longiora, fertilia; duo breviora ſterilia. Antheræ loculis oblongis, duæ ſuperiores dependentes; duæ inferiores erectæ, ſagittatæ, ſquamiformes.

Pistillum. Germen tetragonum. Stylus filiformis, parum curvatus, longitudine tubi. Stigma bifidum, reflexum.

Pericarpium nullum. Calyx in fundo ſemina continens.

Semina quatuor, ovalia.

Empalement. Cup one-leaf, nearly cylindrical, upright, remaining, five-toothed, equal; ſupported by two leaflets.

Blossom one petal; petal tubular, rather longer than the cup; border ſpreading, five-divided, nearly equal; the two upper ſegments notched at the end.

Chives. Four threads, thread-ſhaped, inſerted into the mouth of the tube, of which the two upper ones are longer, and fertile; two ſhorter, and ſterile. Tips with oblong cells, the two upper ones hang down; the two lower are upright, arrow-ſhaped, and like thin ſcales.

Pointal. Seed-bud four-ſided. Shaft thread-ſhaped, a little curved, the length of the tube. Summit two-cleft, reflexed.

Seed-vessel none. Cup containing the ſeeds at the bottom.

Seeds four, oval.

SPECIFIC CHARACTER.

Weſteringia foliis verticillatis, ſub-linearibus, acutis, ſubtus ſericeis; floribus axillaribus, ſpicatis.

Weſteringia with leaves growing in whorls, nearly linear, pointed and ſilky underneath; flowers grow from the baſe of the leaves cloſe to the ſtem, in ſpikes.

REFERENCE TO THE PLATE.

1. The Empalement, with the two props attached to the baſe.
2. A Flower ſpread open, with the chives in their place, magnified.
3. The Pointal, natural ſize.
4. The ſame magnified.

The preſent plant was introduced to our gardens, in the year 1791, from New South Wales, by Meſſ. Lee and Kennedy, Hammerſmith. It was firſt named Cunila verticillata, and, from what we can judge, it might, without much forcing of the characters of the genus, have been ſo continued; but our opinions ſhall always give way, when the deciſion is paſt from ſuch ſuperior talents as thoſe of Dr. Smith; by whom it has been thought to poſſeſs a ſufficiency of diſtinctive character, on which to form a new genus, under the title it here bears. It is a buſhy ſhrub, grows to the height of three feet, the branches ſtanding out almoſt horizontally, in whorls, and the whole plant bearing a great reſemblance to the Roſemary. It is propagated by cuttings made in March from the end of the ſmall branches; approves moſt of light ſandy peat, and is in flower from March till November. The whole plant is ſcentleſs.

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Westeringia rosmarinacea

PLATE CCXV.

EMBOTHRIUM SALIGNUM.

Willow-like Embothrium.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Cor. tetrapetala. Stamina limbo petalorum inserta. Folliculus polyspermus. Sem. alata.

Empalement none. Blosl. four-petalled. Chives inserted into the limb of the petals. One-celled-pod, many seeded. Seeds winged.

See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis lanceolatis, uninervis, utrinque glaberrimis; umbellulis axillaribus; corollis subalbidis.

Embothrium with lance-shaped leaves, one nerved, very smooth on both sides; the small umbels of flowers grow from the insertion of the leaves into the stem; blossoms whitish.

REFERENCE TO THE PLATE.

1. A flower complete, with the summit relieved from the petals, magnified.
2. The same with the summit yet restrained by the petals.
3. One petal with the tip, magnified.
4. The Seed-bud, Shaft, and Summit, magnified.

THIS Genus, if we may judge from what we already possess, amounting to 6 species, promises to furnish an ample feast for Botanists; for we have no doubt, but the species are as numerous as of any one from New Holland. The Willow-like Embothrium makes a very handsome bushy green-house plant; the leaves are not subject to damp, and the stem acquires the height of 5 or 6 feet. It flowers about May, and from the manner in which the leaves rather fall downwards, from their insertion, leaving the bunches of flowers fully exposed, at their base, it has a very picturesque appearance, as the whole plant is sometimes covered with blossoms. It thrives best in sandy peat earth, and is increased by cuttings, made about March, or April, and placed in the heat of the Hot-house, or a cucumber frame. Our figure was taken at the Hammersmith Nursery; where, it was first raised from seeds, in the year 1791.

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Embothrium salignum

PLATE CCXVI.

EPIDENDRUM SINENSE.

Chineſe Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM turbinatum, obliquum, reflexum. || Honey-cup top-ſhaped, oblique and reflexed.

See Plate XIII. Vol. I. EPIDENDRUM COCHLEATUM.

SPECIFIC CHARACTER.

Epidendrum foliis enſiformibus, nervoſis, radicalibus; nectario revoluto, punctato; petalis ſtriatis. || Epidendrum with ſword-ſhaped leaves, nerved, and growing from the root; honey-cup rolled back, and dotted; petals ſtriped.

REFERENCE TO THE PLATE.

1. A flower, one of the petals and the honey-cup cut off; to ſhew the ſituation, and place of the parts of fructification.
2. The Honey-cup.
3. The Seed-bud, Shaft, Summit, and Chives; the ſmall hood which covers the Chives, lifted up.

THIS long genus of plants, ſo little known hitherto, but in our books, bids fair to become one of the greateſt ornaments of our hot-houſes; 20 ſpecies we already enumerate, in the different collections in the vicinity of London; one of which, the preſent plant, has not flowered in this kingdom, till this year, although introduced, ſo long ago as 1793, by the late J. Slater, Eſq. of Layton-ſtone; at the ſame time with the two varieties of the Double Camellia, from China. Our figure was taken in September 1801, from a plant which had been placed in the ſpring of the ſame year, in the Conſervatory built on purpoſe for the protection of Chineſe plants, and where they flouriſh to a degree, not ſeen before in this country, in the garden of G. Hibbert Eſq. Clapham common. It is propagated by offsets, from the root; is rather a hardy hot-houſe plant; and thrives moſt in a mixture of ſandy loam, and peat; about one fourth of the loam, and three fourths peat, or leaf-mould.

Upon the firſt obſervation of this plant, we were inclined to think it the ſpecies deſigned by Thunberg in his Icon. Plant. Japon. 28, under the Genus Limodorum; and afterwards, altered by him, in the Linnæan Tranſ. Vol. ii. p. 327, to Epidendrum ſtriatum. But upon cloſe examination of it, as anſwering his deſcriptions, &c. we cannot but think it, if not a different ſpecies, at leaſt a very ſtrong variety of his plant; wherefore, we have retained the name it is in common known by, in the various collections in which we have ſeen it. If we were to decide on the ſubject, it ſhould be to place both that and this plant again to Limodorum; to which, they hold greater affinity than to Epidendrum; but indeed, we have an opinion, that one title might readily ſerve for the plants conſtituting both genera.

Pl. 216

Epidendrum sinensis

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INDEX

TO THE PLANTS CONTAINED IN VOL. III.

Plate 145	Hillia longiflora	Long-flowered Hillia	H. H.	Shrub.	February.
146	Pſoralea aculeata	Prickly Pſoralea	G. H.	Shrub.	Auguſt.
147	Gladiolus cuſpidatus	Spear-ſpotted Gladiolus	G. H.	Bulb.	May.
148	Lachenalia quadricolor	Four-coloured Lachenalia	G. H.	Bulb.	December.
149	Struthiola ciliata	Fringed-leaved Struthiola	G. H.	Shrub.	Auguſt.
150	Geranium præmorsum	Bitten-leaved Geranium	H. H.	Shrub.	March.
151	Pittoſporum coriaceum	Thick-leaved Pittoſporum	G. H.	Shrub.	May.
152	Geranium ſpathulatum	Spathula-leaved Geranium	G. H.	Shrub.	April.
153	Viola pedata	Bird's-foot-leaved Violet	Har.	Herb.	May.
154	Echium argenteum	Silvery-leaved Viper's Bugloſs	G. H.	Shrub.	July.
155	Ixia polyſtachia	Many-ſpiked Ixia	G. H.	Bulb.	May.
156	Bankſia ericæfolia	Heath-leaved Bankſia	G. H.	Shrub.	March.
157	Cordia Sebeſtena	Rough-leaved Cordia	H. H.	Shrub.	April.
158	Geranium echinatum	Prickly-ſtalked Geranium	H. H.	Shrub.	March.
159	Ixia capitata, *Var. flo. albo, fundo nigro.*	Bunch-flowering Ixia. *Var. white fl. black bottom*	G. H.	Bulb.	May.
160	Ariſtea major	Spike-flowered Ariſtea	G. H.	Herb.	July.
161	Hermannia pulverata	Powdered Hermannia	G. H.	Shrub.	April.
162	Verbaſcum ferrugineum	Ruſty-flowered Mullein	Har.	Herb.	April.
163	Amaryllis Fothergillia	Fothergillian Lily-Daffodil	H. H.	Bulb.	May.
164	Galaxia grandiflora	Large-flowered Galaxia	G. H.	Bulb.	February.
165	Echium glaucophyllum	Sea-green-leaved Viper's-Bugloſs	G. H.	Shrub.	May.
166	Gladiolus abreviatus	Shortened-petalled Gladiolus	G. H.	Bulb.	March.
167	Brunsfelſia undulata	Waved-flowered Brunsfelſia	H. H.	Shrub.	March.
168	Geranium pictum	Painted-flowered Geranium	G. H.	Shrub.	April.
169	Crinum giganteum	Gigantic Aſphodell-Lily	H. H.	Bulb.	Auguſt.
170	Ixia Bulbocodium *Var. fl. ſpecioſiſſimo*	Crocus-leaved Ixia. *Var. moſt beautiful flower*	G. H.	Bulb.	March.
171	Hypoxis linearis	Linear-leaved Hypoxis	G. H.	Bulb.	March.
172	Anemone palmata	Cyclamen-leaved Portugal Anemone	Har.	Herb.	May.
173	Geranium roſeum	Roſy Geranium	H. H.	Shrub.	March.
174	Antholyza tubuloſa	Tubular Antholyza	G. H.	Bulb.	June.
175	Melaleuca ericæfolia	Heath-leaved Melaleuca	G. H.	Shrub.	July.
176	Cratæva Capparoides	Caper-like Cratæva	H. H.	Shrub.	June.
177	Ixia punctata	Dotted-flowered Ixia	G. H.	Bulb.	May.
178	Ferraria pavonia	Mexican Ferraria	H. H.	Bulb.	July.
179	Amaryllis reticulata	Netted-flowered Lily-Daffodil	H. H.	Bulb.	May.
180	Atragene auſtriaca	Auſtrian Atragene	Har.	Herb.	May.
181	Vaccinium virgatum	Green-twigged Whortle-berry	Har.	Shrub.	June.
182	Malva divaricata	Straddling-branched Mallow	G. H.	Shrub.	June.
183	Gardenia tubiflora	Tube-flowered Gardenia	H. H.	Shrub.	July.
184	Pergularia minor	Smaller Weſt-Coaſt Creeper	H. H.	Shrub.	Auguſt.
185	Pergularia odoratiſſima	Sweet Pergularia, or Chineſe-Creeper	H. H.	Shrub.	Auguſt.
186	Ixia ſpecioſa	Deep Crimſon Ixia	G. H.	Bulb.	May.
187	Echites ſuberecta	Oval-leaved Echites	H. H.	Shrub.	May.
188	Gladiolus campanulatus	Bell-flowered Gladiolus	G. H.	Bulb.	May.
189	Zinnia verticillata	Double Zinnia	Har.	Ann.	Auguſt.
190	Geranium aſtragalifolium	Aſtragalus-leaved Geranium	H. H.	Shrub.	July.
191	Platylobium ſcolopendrum	Scolopendra-like-ſtemmed Platylobium	G. H.	Shrub.	May.
192	Antholyza fulgens	Refulgent-flowered Antholyza	G. H.	Bulb.	May.
193	Geranium lineare	Linear-petalled Geranium	H. H.	Shrub.	July.
194	Hemerocallis alba	White Day-Lily	G. H.	Herb.	Auguſt.
195	Hypoxis obliqua	Oblique-leaved Hypoxis	G. H.	Herb.	June.
196	Ixia maculata	Spotted-flowered Ixia	G. H.	Bulb.	May.
197	Nymphæa cærulea	Blue Water-Lily	G. H.	Aqua.	July.
198	Bauera rubioides	Three-leaved Bauera	G. H.	Shrub.	Auguſt.
199	Camellia japonica. *Var. fl. rub. pleno*	Double Red Camellia	G. H.	Shrub.	January.
200	Melaleuca hypericifolia	St. John's-wort-leaved Melaleuca	G. H.	Shrub.	September.
201	Aizoon canarienſe	Purſlane-leaved Aizoon	H. H.	Herb.	July.
202	Samyda ſerrulata	Sawed-leaved Samyda	H. H.	Shrub.	July.
203	Ixia columnaris	Columnar-chived Ixia	G. H.	Bulb.	June.
204	Geranium laciniatum. *Var. flo. purp.*	Ragged-leaved Geranium. *Purp. fl. Var.*	H. H.	Shrub.	June.
205	Platylobium lanceolatum	Lance-ſhaped-leaved Flat-Pea	G. H.	Shrub.	November.
206	Dracæna borealis	Oval-leaved Dracæna	Har.	Herb.	July.
207	Mimoſa longifolia	Long-leaved Mimoſa	G. H.	Shrub.	March.
208	Laſiopetalum ferrugineum	Ruſty Woolly-bloſſom	G. H.	Shrub.	March.
209	Geranium melananthum	Black-flowered Geranium	H. H.	Shrub.	June.
210	Antholyza Æthiopica	Broad-leaved Antholyza	G. H.	Bulb.	July.
211	Ixia columnaris. *Var. verſicolor*	Columnar-chived Ixia. *Changeable fl. Var.*	G. H.	Bulb.	June.
212	Pogonia debilis	Twining Pogonia	G. H.	Shrub.	September.
213	Ixia columnaris. *Var. latifolia*	Columnar-chived Ixia. *Broad-leaved Var.*	G. H.	Bulb.	June.
214	Weſteringia roſmarinacea	Roſemary-like Weſteringia	G. H.	Shrub.	September.
215	Embothryum ſalignum	Willow-like Embothryum	G. H.	Shrub.	May.
216	Epidendrum ſinenſe	Chineſe Epidendrum	H. H.	Shrub.	September.

ERRATA.

Plate 153, Order, dele *polygamia.*
163, Sp. Ch. lin. 2, genetalibus, lege, *genitalibus.*
171, Sp. Ch. lin. 2, longiore, lege, *longior.*
175, Sp. Ch. lin. 2, enerviis, lege, *enervis.*
Ref. lin. 1, for, one which, read, *one of which.*
184, Gen. Ch. Nect. lin. 1, exterium, lege, *exterius.* Lin. 4, interium, lege, *interius.*
188, Sp. Ch. lin. 2, longior, lege, *longiore.*
189, Sp. Ch. lin. 1, for, without, read, *with.*
191, Gen. Ch. Stam. lin. 3, affurentia, lege *affurgentia.*
197, Gen. Ch. Corol. lin. 1, quindecem, lege, *quindecim.*
200, Sp. Ch. lin. 2, uninerviis, lege, *uninervis.*
202, Gen. Ch. Stam. lin. 2, octodecem, lege, *octodecim.*
206, Order, for Pointals, read, *Pointal.* Gen. Ch. Pist. lin. 2, staminium, lege, *staminum.*
207, Sp. Ch. lin. 1, post, integris, inf. (,)
210, Sp. Ch. lin. 2, corolla, lege, *corollæ.*